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ABSTRACT

These selected papers on non-traditional and interdisciplinary programs in higher education take as their theme, developing effective interdisciplinary instruction. The first set of papers which address teaching in interdisciplinary programs describe particular programs, address teaching theory, and examine interdisciplinary teaching in connection with particular subject areas. The next group of papers address meeting the needs of special groups such as minorities, women, non-traditional women graduate students, under prepared students and female prisoners. Several papers examine how to assure academic quality in non-traditional programs with papers describing actual procedures and approaches, or discussing evaluation theory and method. Academic partnerships with business are the subject of nine papers which describe exiting programs or examine the issues that arise in these situations. Program delivery, from advertising programs, to weekend and off campus, and electronic media based programs are the topics of the following seven papers. Three papers address non-traditional approaches to reading and writing, two describe actual approaches and one tackles some of the hermeneutical issues involved. The papers in the final section look at the adult learner and continuing education: how to attract them, their self-direction and library literacy, accommodating transfer students, orientation programs, and profiles of non-traditional adult learners. (JB)

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Virginia, Beach, Virginia
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"Developing Effective Interdisciplinary Instruction"

Selected Papers from the Ninth Annual Conference

on

NON-TRADITIONAL

and

INTERDISCIPLINARY PROGRAMS

Edited by:

Sally J. Reithlingshoefer

Sponsored by:

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INTERDISCIPLINARY APPROACHES TO TEACHING

AND

TEACHING IN INTERDISCIPLINARY PROGRAMS

HISTORY AS INQUIRY: THE HANNAH DUSTAN STORY

Christopher Bennett Becker

Introduction

What to read and how to read it -- what public dialogue in the humanities these days does not sooner or later come around to this question of questions? And in the teaching of American history and literature it is asked sooner rather than later.

At Quinnipiac College in Hamden, Connecticut, we are currently developing a Master of Arts in Teaching program with an interdisciplinary emphasis. For instance, students wishing to teach English, history, or social studies in high school begin by taking a summer "gateway" course with a 'New England Studies' focus, coupled with a 'methods' course taught by a high school master teacher. For these students, I have begun developing a series of readings, the first of which, on Hannah Dustan's captivity and 'deliverance' in 17th century New England, has been used at three levels of instruction:in the M.A.T. gateway course, in my freshman American history sections at Quinnipiac, and in the 11th grade AP and middle level American literature classes taught at nearby Haddam-Killingworth High School by my colleague Deborah Miles, the methods instructor with whom I work in tandem at Quinnipiac in the summer.

The reader is structured to promote genuine inquiry by asking teacher and student to add their versions to the series of retellings of a 'classic' historical episode which continues to inspire such retellings because of its intrinsic human interest. This is all the excuse I would need as a teacher, but I am as mindful as the rest of us of the need to render the gist of humanistic endeavor in the various jargons of our various constituencies. I have no problem with calling what we are doing at the secondary level an exercise in 'process,' in the development of 'critical thinking,' in 'values,' because it is indeed an ancient and very superior way of achieving those things -- history conceived of as propaedeutic. At the college freshman level, where history rubs shoulders with psychology, sociology, anthropology, one may introduce humanistic interdisciplinarity more formally by stressing that the attribution of motives to Hannah Dustan by Cotton Mather, by Hawthorne, or for that matter by Leslie Fiedler, by me, and by the student, uniformly takes place within a framework of assumptions that can be placed in the history of ideas, of culture, of science. At the graduate level (one could also do this with advanced undergraduates, obviously) such helpful concepts as that of 'communities of interpretation'

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and Kenneth Burke's 'grammar of motives' may be adduced. All of this is made germane by the time-honored practice of rigging the readings so that our ship blows where the Captain lists -- to waters where these tools are needed and handy. So let me introduce Hannah and the Interpreters without further ado.

The Hannah Dustan Story

On March 15, 1697, in the waning days of King William's War, a band of Indians attacked Haverhill, on the northern frontier of Massachusetts, burning several houses, killing twenty-seven inhabitants and carrying off thirteen, including Hannah Dustan, who was convalescing from childbirth and whose infant they killed on the spot. Along with her nurse and a fifteen-year old boy she was taken north to an island on the Merrimack just above present-day Concord, New Hampshire. On the morning of April 30, before sunrise, Hannah, her nurse, and the boy tomahawked the Indians in their sleep, -- man, woman, and child, -- taking ten scalps back with them to Massachusetts, where they collected the bounty offered by the government. Hannah Dustan became an overnight celebrity in Boston. Cotton Mather preached a notable "deliverance" sermon in her presence.

Hannah never wrote down her own story, but Cotton Mather published several versions of it and the diarist Samuel Sewall recorded his conversation with her. New England writers of the first half of the nineteenth century were fascinated by Hannah, and hotly debated the ethics of her action. Statues were erected to her in the town square at Haverhill and on Penacook Island. Timothy Dwight and John Greenleaf Whittier, Whittier's friend Mirick (the historian of Haverhill), Nathaniel Hawthorne and Henry David Thoreau offered their versions of her story. My reader assembles Mather's version from the Magnalia, Mirick's comparison of Hannah's and her husband's heroism, Hawthorne's 1836 retelling for his family magazine, and Thoreau's account in A Week on the Concord and Merrimack Rivers. These are given brief critical introductions and are annotated to help with vocabulary and to add needed historical information.

Several things are at least slightly novel about this set of readings when compared to readings normally used in English or history courses. (They would be less novel, of course, in the avowedly interdisciplinary context of American Studies.)

In the context of the teaching of American literature, the readings interestingly blur the line between 'imaginative literature' and non-fiction. The student is not committing a critical fallacy by assuming that Hannah Dustan is a real person, but where in these stories is 'the real Hannah'? Debbie Miles' high school juniors, after writing papers contrasting authorial points of view, were bothered that they did not have Hannah's version. That, of course, was a great opportunity to point out that it too would have been a version with one more point of view which would not have been 'privileged'-- that autobiography is also an art form, one in which we attribute motives to ourselves instead of letting others do it to us.

In the context of the teaching of American history, on the other hand, the use of Mather's, Hawthorne's, and Thoreau's obviously 'literary' retellings, besides bringing in a little welcome sensationalism, can be used to make the point that the stories offered by modern social science also are not privileged. Cotton Mather's Providential and Thoreau's evolutionary philosophies of history, Mirick's and Hawthorne's psychology of feminine vengefulness -- these were the 'social science' of their day and need to be explained in terms of the history of ideas.

So the questions arise: What was the image of woman and wife in Puritan days, and how is it reflected in Mather's account? What was the nineteenth century "cult of true womanhood" and how may it have warped Mirick's perceptions? And what do we know, from books like Laurel Ulrich's, about what it was really like to be a frontier wife in northern New England in the seventeenth century?

And the questions arise: Within what frameworks did Mather, Hawthorne, Thoreau, explain the white-Indian confrontation? What did they take to be civilized or savage behavior, and why? Studies of ideas of "savagism and civilization" like Roy Harvey Pearce's, or Robert Sayre's book on Thoreau and the American Indian, offer the needed background to spell out the preconceptions of our authors here. Are we able to offer more refined, more subtle explanations of Hannah's conduct today, or can we just explain Hawthorne and Thoreau better?

In either classroom, one will want students to consider common human issues. Is a 'final judgment' ever possible or desirable? How do jurors make up their minds about a defendant's intent in a murder case? When is killing genocide? What are war crimes? What is the role of 'expert testimony' about someone's mental state?

Debbie Miles had had her students write "authorial point of view" papers on the stories of Hannah this last December. When her school decided in February that every class would deal with the Persian Gulf war, she remembered a conversation we had just had about the timeliness of Hannah's story in view of the Iraqi hostage and P.O.W. situation, and so she had her students write, in the journals they were keeping, their own imagined accounts of what they would do as American wives separated from their husbands and children and held captive in Baghdad with a young R.A.F. officer and given the opportunity to escape with the use of force. She tells me that the journals (which the students keep private) produced some very interesting and moving accounts. It would be fun to seek out stylistic influences! Life does imitate Art.

The Teacher as Author

The connection between author and authority was obvious long before Michel Foucault became both. I hope it is equally obvious that curricula have authors. All the problems associated with the idea of "canon" are lying in wait in the idea of "curriculum." It will not come as any surprise to you that even how we select from a work has ideological overtones. The way I trimmed the Hannah Dustan episode out of Thoreau's account of his excursion, allowing him to go on and tie it back to Adam and Eve, proved to be a pedagogical failure, and so I will cut so as to accentuate instead the contrast of the peaceful journey down the river of the brothers Thoreau, their harmony with nature, with the fearful and disharmonious journey of Hannah and her cohorts. Perhaps I will illustrate this contrast in class with a rather wacky painting I encountered at an exhibit in December, Poussin's "Landscape with Man Pursued by a Snake," which shows one man peacefully fishing, another praying to a natural shrine, as the duo of the title streak in from the left. The comparison is obvious even if you don't find it necessary to add that a similar world view going back to Stoic pantheism is shared by Poussin and Thoreau.

As curriculum-makers, then, we are inevitably authors and authorities of a kind -- sometimes even of a very good kind. (I am reminded of the title of a work published in 1762 by a fellow Connecticut Yankee, Jared Eliot: An Essay on the Invention or Art of Making Very Good, if Not the Best Iron, from Black Sea Sand.) I believe this should be kept at the forefront of any teacher preparation program, and an interdisciplinary one is well suited to the purpose because it does not fall back on the authority of an existing discipline, with its paradigms, its textbooks, its fixed curricula.

Students who come into a program knowing they must go in front of a high school class as student teachers in a matter of months, and as beginning teachers in a little over a year, prove, as we should have guessed, to be extraordinarily sensitive to issues of authority in the classroom. We could make them more comfortable with their roles by exercising our scholarship in more traditional ways, by falling back on the framework of a single discipline and allowing our teaching to become, in Thomas Kuhn's terms, mere 'puzzle-solving' within the reassuringly closed schema of an accepted paradigm. Indeed we do offer some of this. The student learns that Cotton Mather's is a 'deliverance sermon,' that Thoreau's book fall within the tradition of pastoral elegy, that the cult of 'primitivism' is analyzable as a sociological phenomenon, that women's studies can offer a special perspective on Hannah Dustan. But the reading unit is set up with the subversive intent of bringing all these endeavors down to sometimes usefully sophisticated, sometimes perhaps deliberately mystifying, attempts to do what teacher and student are engaged in doing -

- retelling Hannah's story in their own words. There are scholarly standards of interpretation, of documentation, of proof, of argument, which are applicable to all coherent and well-intentioned attempts at narration or explanation, and which every teacher will fall back on in moderating discussion and evaluating her students' performance -- and sometimes even her own.

Thus in our choosing, in our judging, in offering our critical interpretations in class, we can hardly ask our students to do more than plagiarize from us if the texts and materials we interpret do not admit of a plurality of interpretations -- if they are not rich enough not to be exhausted by our performance. The existence of a centuries-long dialogue, of a 'community of interpretation' centered around the texts in question, is good evidence that, properly presented, they will continue to engage students. How many high school students come to us thinking that if they read The Scarlet Letter once they will gain nothing from reading it again? That reflects a failure to show them what a text is, and what reading and reflection are all about. The texts young people read best are the ones in which they can read themselves. On this score, Hannah Dustan does well. The student who writes "Hannah Dustan was justified because I would have done the same thing" has a long way to go, but she has been engaged and can be asked to become the judge of her own symbolic actions -- to follow Hawthorne's Hester Prynne in extricating herself from her own 'moral wilderness' (a teacher's value judgement there!) It is not only a matter of figuring out how to present the text so that the students are genuinely engaged. It must also engage the teacher! We cannot get around the necessity that a text must be ours before we can make it theirs. Whatever litmus tests for racism, sexism, and the like a text may pass, there is one, and only one positive standard it must meet, one that we and our texts are tested against every day in the teaching of 'the humanities': it must greatly engage our common humanity. History is nothing if it is not in the end an end-less inquiry into ourselves.

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* * *

Single copies of the Quinnipiac reader *The Hannah Dustan Story* may be obtained by writing Christopher Becker, Box 75, Quinnipiac College, Hamden, CT 06518.

AMERICAN INDIVIDUALISM FROM LINCOLN TO THE PRESENT: AN INTERDISCIPLINARY TEACHING/LEARNING EXPERIENCE

Eugene G. Bozniak
Gary L. Malecha
Candadai Seshachari

Stanley Fish in a well-known article argues that the current pedagogical fascination with interdisciplinary studies is the natural outgrowth of "left culturalist" movements such as those of feminism, Marxism and the new historicism (15). He points out that these movements are all alike in that they share a common hostility toward how institutions have traditionally organized disciplinary affairs. At the same time, he does not mind traditional disciplines expanding into "territories hitherto marked as belonging to someone else" (21). Neither of these concerns, as expounded by Stanley Fish, served as the basis for a challenging and exciting experimental course we are about to describe; what transpired was that the course was the result of a proposal that three active faculty from three distinct and historically separate disciplines submitted in response to an administrative effort at faculty revitalization. The administration was specially interested in bringing together faculty from diverse disciplines so that they might bring newer insights to the teaching/learning process. At Weber State we also were responding to a newly redefined university context.

The Institutional Context

Weber State University is a comprehensive, primarily undergraduate, public institution that, four years ago, undertook a redefinition of its central mission. In revising its statement of purpose, Weber State propounded a vision of higher learning that is emblematic of the educational outlook associated with a model of institution recently identified by a growing number of members in the academic community as a "Metropolitan University." What distinguishes this newly articulated model from its older and more established counterparts -- research institutions and liberal arts colleges -- is that it defines the educative, scholarly and professional responsibilities of the university in light of the needs of the specific

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metropolitan region that it serves (Plante). Thus envisaged, the Metropolitan University seeks innovative and flexible ways to prepare students to address the formidable intellectual, technical and ethical challenges that their communities will confront in the coming decades.

Central to Weber State's dedication to the ideals embodied in the concept of a Metropolitan University is its commitment, as enunciated in its Mission Statement, to the creation of an environment supportive of interdisciplinary pedagogy. As scholars have emphasized in recent years, adequate preparation of students for an evolving, interrelated world entails a mastery of cognitive and other skills and abilities that simply cannot be gained from a curriculum constituted by a myriad of specialized and provincial courses based on traditional academic disciplines. Such a compartmentalized education, for example, does not help students realize the flexibility in skills and the faculties in reasoning that, as Patrick Hill reminds us in his critique of instructional formats based on the "cafeteria model of higher education," are required for the "rapidly changing world" that they will be confronting (130-131). Nor, for that matter, does training citizens in what William H. Newell refers to as the "narrow think" of individuated disciplines equip them, as he puts it, with the critical "skills of integrative thinking or synthesis" that is required to proffer appropriate solutions for problems that cut across the competencies of several disciplines (248). Louis Dumont, the French anthropologist, highlighted this modern predicament of disciplinary fragmentation devoid of a corresponding architectonic standpoint when he wrote: "In the modern world each of our particular viewpoints or specialized pursuits does not know very well -- or does not know at all -- what it is about and the reason for its existence or distinctness, which is more often a matter of fact than of consensus or rationality. Just as our rationality is mostly a matter of the relation of means and ends, while the hierarchy of ends is left out, so also our rationality manifests itself within each of our neatly distinct compartments but not in their distribution, definition and arrangement" (qtd. in Bellah 278).

The interdisciplinary approach, by way of contrast, purports to provide a synoptic educational experience. It also projects outcomes appropriate for a world in which much of the information/knowledge gained in higher education is ephemeral. Not only do interdisciplinary studies promote "integration of knowledge," support "freedom of inquiry," and encourage "innovation," but they also, according to William H. Newell and William J. Green, impart to students a wide range of invaluable intellectual skills, traits and attitudes that facilitate student adjustment to this rapidly evolving world. Included here are, *inter alia*, skills in deductive analysis, synthetic reasoning, critical thinking, and normative inquiry as well as an increased "tolerance for ambiguity" (29).

Concurrent with the new mission implementation, Weber State's administration made a concerted effort to procure external funds that could be used for faculty enrichment programs. A local banking family, interested in awarding monies for significant faculty development, provided the initial impetus for these activities and programs. These grateful contributions made by the Hemingway Family Trust were subsequently combined with additional monies that the University internally reallocated to faculty growth programs. Having established a fund for faculty vitality, the central administration then issued a call for proposals that developed ideas that could be tried for the purpose of augmenting faculty growth.

Included in this request for proposals was a call to inaugurate an educational model based on, though not completely congruent with, the Federated Learning Community paradigm developed at the State University of New York at Stony Brook (Hill 129-145; Smith 101-107). This model, one that we eventually decided to apply, entails the creation of a full time course organized around a major coherent theme or significant intellectual problem. Ranging from approximately 12 to 16 credit hours, this course is team-taught by a coterie of faculty members whose disciplinary expertise affords them an opportunity to elucidate the theme or problem selected for consideration. Emphasizing student competencies in written and oral communication, inductive and deductive reasoning, quantitative analysis, and computer literacy, this type of class can apply a wide range of instructional formats, including, but not limited to, classroom lectures, laboratory assignments, field work activities, special projects, and group discussions.

It should be emphasized that unlike the motivation that often exists elsewhere for interdisciplinary programs, our experience was a very positive, non-threatening, and cooperative one. Supported by the administration in this voluntary effort, we were provided an opportunity to work in an environment that was generally "non-hostile." Hence, relieved of both pressures engendered by concerns for student enrollments and the professional animosity that emerges in curriculum reforms unilaterally imposed by administrative fiat, we were free to regard this as a chance to formulate a program we often think of as pedagogically idyllic but one we usually avoid because of its inherent high risk. The chance to experiment, to offer a unique opportunity for students in a significant block of time (viz a twelve-credit hour block), thus unifying a theme which runs throughout the history of the development of the American spirit within the context of an essentially risk-free environment, was exciting indeed. The private funding aspect was particularly appealing, especially since evidence indicates that public funding reinforces disciplinary boundaries (Sommer 223-224). We knew full-well that the planning and scheduling required an inordinate amount of time, and like so many other such developments, we banked on the hope that the rewards for the faculty would far outstrip the lack of adequate and realistic compensation for the effort expended.

The Pedagogical Context

Given this setting and desire to meet the challenge presented to the faculty, four faculty members submitted a proposal to develop a course. The faculty proposing the course represented the disciplines of Economics, Political Science, English, and Natural Science. Following intensive weekly discussions, we were able to articulate the guiding purpose of our endeavor: to provide students with an opportunity to integrate knowledge across the disciplines of literature, economics, political science, and natural science around the central theme of individualism in the United States during the last century. With that, the idea for our course, "American Individualism: From Lincoln to the Present," was conceived.

Operating within the framework of our selected theme, we proceeded to identify specific goals that we wanted to achieve. These were: (1) to integrate the four disciplinary traditions and methods to present one unifying theme -- the evolution of individualism in America -- in order to promote students' ability to synthesize diverse concepts, ideas, and viewpoints; (2) to demonstrate the interconnectedness of ideas from various disciplines in a multidisciplinary setting; (3) to identify motivations in each of the sub-themes during a formative period in our people's history; (4) to clarify values through an understanding of the history, development, and bringing to fruition of ideas; (5) to enhance critical thinking, writing, and communication skills; (6) to provide an environment for immediate peer evaluation of ideas; and (7) to reflect a commitment to the University mission by providing a quality undergraduate educational experience which transcends traditional disciplinary boundaries.

So that we could better realize our goals the first time that we offered the course, we decided to target certain constituencies within the University's student population. As it is, the majority of students at Weber State are commuters who hold full or at least part-time jobs in the community. Prime morning hours are usually overcrowded, with little activity in the afternoons, at least until nontraditional enrollments increase again in late afternoon and evening. The resultant environment, therefore, is not terribly conducive to a sense of college community. One notable exception is the Honors Program where students do share experiences outside of the classroom, and the collegiality that results gives the students an enriching and intellectually stimulating experience. Since we were interested in fostering a greater sense of campus community, we proposed our new interdisciplinary course through the Honors Program where ideas for experimental courses have traditionally received an enthusiastic hearing. Of equal importance, the mechanism for the course already existed within a flexible framework of courses in Honors that fulfilled General Education area requirements which, at Weber State, are met through a series of distribution courses. Finally, we concentrated our attention on enrolling first and second year Honors students. This was not without significance, especially since some evidence intimates that juniors and seniors who, to borrow an analogy from Marjorie Miller, because they have already viewed the world through the "unique lens" ground and adjusted by their discipline (101-107), have a more difficult time getting acclimated to the type of dialogue that unfolds within an interdisciplinary context (Newell and Green 28).

So that we could fully realize the educational outcomes ascribed to interdisciplinary inquiry, we carefully orchestrated our methodology of delivery. Thus, over the course of an entire academic year, we held weekly meetings to plan in detail the topics that would be presented and discussed in each class session. A very flexible, though multifaceted, approach was planned to utilize lectures, discussions, films and videos, individual active participation in small group settings, and group presentations of projects. We ultimately opted for a truly team-taught approach, that is, a program where all the participants would be present as often as possible during our three hour class sessions. This, we felt, would promote an environment that both encouraged and reinforced students' efforts to synthesize ideas and information disseminated and elaborated in the course. We also anticipated that it would afford the faculty ample opportunity to confront, challenge, assess and even absorb the assumptions, concepts and theoretical perspectives associated with one another's disciplines.

We also decided to provide students with additional academic support by enlisting the services of student tutors. The role of tutors is to augment the educational experience by leading tutorials where the speaking, reading and writing skills of the students are refined through intensive discussions and through peer review of journals, papers, and group projects assigned during the quarter. Significant peer teaching and learning, then, is one strength of this course. A key to the success of peer teaching comes from finding students who are not only well-read themselves but have had some experience in leading group discussions, and have the ability to assist in the development of student writing skills.

Considerable out-of-class reading and writing assignments are made to prepare students for opportunities to develop speaking and listening skills through oral presentations which are both formal and informal. Another important feature of the methodology of delivery is the requirement for significant small group projects developed over the entire quarter. The purpose of these projects is to foster collegial and holistic thinking about a specific problem, idea or individual. These projects, moreover, are designed to allow students to be innovative and creative in both the selection of the topics as well as the method of presentation. For example, group projects can involve the development of a documentary video or slide-tape presentation, a short one-act play written to capture the character of significant personages, a Steve Allen like "Meeting of the Minds," or a similar undertaking, all of which go a long way in enhancing the student learning experience. Students are also required to maintain both a journal of daily activities and a portfolio of assignments for evaluation of outcomes. Since this approach is unique, each faculty member also summarizes and evaluates their reactions to what transpires in class.

Nontraditional courses require nontraditional methods for assessing outcomes and evaluating students. Rather than emphasizing examinations for evaluating student growth in this course, we use their papers written, portfolios, journals, and projects completed successfully as the basis. Higher order learning outcomes such as critical thinking skills (differentiating between fact and opinion; recognizing and evaluating author bias and rhetoric; developing inferential skills; recognizing logical fallacies and faulty reasoning; and making judgments and drawing logical conclusions using sound quantitative reasoning) are evaluated subjectively by the faculty, student peers (tutors), and the students themselves through a comprehensive questionnaire. One of the advantages of a small class size is that students offer a continuous assessment in an informal way at points where changes can be incorporated along the way. The value of student peers also cannot be underestimated in regard to evaluation and assessment of the methodology employed.

Given a nontraditional format of a twelve-hour block course, recruitment of students becomes a challenge. Since our course is essentially three existing Honors courses tied together such that students must register for all three simultaneously, one attractive feature is that four hours of credit are earned in each of the General Education areas of Humanities, Social Science, and Natural Science. While freshmen and sophomores are most in need of such credits, the better prepared student is targeted since the higher order thinking skills of integration and synthesis are required of the student.

The Professional Growth Context

While many such interdisciplinary courses focus upon student growth, less attention is devoted to how such courses impact faculty growth and professional vitality. Our experience indicates significant and positive outcomes relative to pedagogical rewards. We believe that any opportunity that forces faculty to rethink the status quo and the paradigm that confines us to rigid disciplinary boundaries is very healthy. It causes us to deal with our own specific disciplines in more informed and relevant ways when we do teach within traditional boundaries. Marjorie Miller has reflected on how involvement in interdisciplinary education can better help the instructor understand the vision of the world gained from the standpoint of his or her own discipline. Her participation in the Federated Learning Community program at Stony Brook, as she recalls it, prompted her to take cognizance of and to confront the ways in which her previously unchallenged disciplinary presuppositions and theoretical outlook had constrained and ultimately determined her perception and interpretation of phenomenal reality. In her words: "I believed, for example, that philosophy had a privileged perspective: that while engineers or chemists or historians might have more detailed knowledge of certain aspects of the terrain, philosophy alone was capable of seeing the relationship of these aspects to the whole. After FLC I came to recognize the ways in which not "parts," not "aspects," but the *whole terrain* is revealed differently by the lenses and filters of engineering, by those of chemistry, by history and by philosophy" (102).

Perhaps, then, the greatest benefits derived by the faculty include: adding excitement and challenge of dealing with very complex issues and interrelationships in an experimental setting; gaining more experience in developing holistic thinking skills; and learning to better cooperate as a team-member in collaboration with colleagues representing different perspectives and points of view. There is also growth involved in dealing with the frustration, intellectual struggle in relating information between disciplines, and the inevitable feelings of inadequacy and vulnerability as one ventures from their comfortable and well-delineated traditional boundaries. The resultant intellectual ferment and fellowship increases the sense of college community amongst the faculty and students, which at Weber State University is extremely important since we are primarily a commuter campus. To the extent that such efforts are looked upon by other faculty with trepidation, success may give such faculty the incentive to venture into similar programs.

The bottom line is that we highly recommend such interdisciplinary courses to others but not without certain caveats. First, there must be at least minimal administrative and peer faculty support before such programs are undertaken. Faculty must be prepared for frustration and the inordinate expenditure of time for course development that is required. With this in mind, faculty should seek and be provided with release time and/or summer stipends for course development. It is here that administrative support is vital in assessing the cost of faculty time in a realistic way (McGrath 9). Secondly, we also suggest that such broad interdisciplinary courses be integrated with an existing Liberal Studies curricula if possible, especially if capstone courses within such General Education programs are sought. Finally, we admonish faculty to always be prepared for the unexpected. For instance, as we were in the middle of planning our course, one member of our group, an economist, left the University. This, in turn, required substantial alterations in our program.

In the final analysis, though, given the extent of learning that takes place, the skills that are developed, and the intellectual rewards that result, we contend that interdisciplinary courses are not only challenging but highly desirable to foster. Indeed, through efforts such as these, it might be possible to, in Page Smith's words, "revive" the "spirit" of higher education.

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LITERATURE AND HISTORY: WAYS OF KNOWING

Jody D. Brown
R. Rex Stephenson

Kavaloski points out in his essay, "Interdisciplinary Education and Humanistic Aspiration," that too often interdisciplinary teaching is really a cloaking of traditional assumptions about the nature of knowledge delivered in courses that are indistinguishable from discipline-based courses in their teaching methods, assignments, and evaluation procedures. He argues for returning the educational system to an essential humanistic dialogue between teachers and students. Despite the pervasive presence of dialogue in Western European educational practices dating back to the Greeks and promoted by Renaissance teachers such as Roger Ascham, American teachers typically distrust nonlecture methods as being somehow not scholarly.

The Glorious Son of York illustrates a way of involving students in rigorous learning. The program develops ideas in an active way, not as static material. In the process of teaching English history and Shakespeare, it also demonstrates scholarly collaboration.

Today we want to present The Glorious Son of York as we would present it for a high school, college, or community audience. You will see that we develop two essential questions: What is the nature of historical truth? and What is the contribution of literature to our understanding of history? After you have a chance to talk with Richard, we will discuss how we select material, how we maintain integrity, and how we develop cooperation that is essential to this project.

[At this point we will present The Glorious Son of York, a play by R. Rex Stephenson, that begins with a brief lecture on the nature of historical reality and establishes some of the principal people in Richard III's life. It continues with selections from The Tragedy of Richard III and comments from Richard, Anne, Elizabeth, Buckingham, and Stanley and involves the audience. It concludes with an audience discussion of the history and literature.]

The purpose of this session is broader than presenting The Glorious Son of York. We are going to move to a discussion of the processes we used to develop and present The Glorious Son of York and explain how this experience is useful in improving college teaching.

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We have presented The Glorious Son of York to approximately forty audiences, equally divided among high school groups, college students, and community groups. The discussion and written evaluations at the end of the performances have always demonstrated that people paid close attention to the history, to the Shakespeare, to issues of morality and ethics, to questions of how we know what we know, and to modern parallels. They know names, dates, and issues that they have not encountered prior to the program. We regularly influence attitudes about reading Shakespeare and history. While this program includes questions about Richard III, both the play and the man, that are frequently encountered only in graduate courses, we have always been successful in communicating those issues to students who do not have specialized literary or historical training.

The success of the concept stems from several factors that we believe confirm the value of dramatization, role playing, and discussion as a means of accomplishing the traditional virtues of lecture in the college classroom while simultaneously involving students in creative and critical thinking. To develop the script, Dr. Stephenson immersed himself in relevant Shakespearean and historical scholarship as identified by Dr. Brown, a Shakespearean scholar, and by Dr. Alexander, a medieval historian and consultant to the project. Dr. Stephenson reviewed appropriate dramatic sources. He then wrote the bulk of the script incorporating selected passages from Shakespeare and historical material from Charles Ross, Paul Murray Kendall, and Jeremy Potter. We decided that our audiences needed some orientation to the times, which we accomplish through the introduction, costumes, props, lobby displays, and audience handouts. They need to believe that knowing about Richard III has significance for them personally, which we establish through the introduction, their involvement in the production, and the discussion afterwards.

As you have seen, The Glorious Son of York is not a typical play. It merges several modes of teaching including lecture, dramatization, role playing, and discussion. Collaboration, a vital part of the project's development and an essential feature of the discussion element, depends on absolute confidence and trust among the scholars involved. We each contribute our own views, and then we each accept the perspective of the others. The principal scholars in such a project have to resolve disagreements through compromise that respects the essential truths of each discipline.

If colleagues are willing to follow this process and respect each other's contributions, college faculty can develop meaningful, interesting crossdisciplinary experiences for their students.

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"A VISION SEEN WITH MORE THAN THE EYE": SOME REMARKS ON THE LITERATURE OF THE NUCLEAR AGE

James Degan

"Most experiences in life can be comprehended by prior experiences," remarked Norris Bradbury about the first atomic explosion near Alamogordo, New Mexico, in July 1945, "but the atom bomb did not fit into any preconceptions possessed by anybody." (Rhodes 674) It would be easy enough to accept--or dismiss--Dr. Bradbury's comment as a classic example of understatement were we to overlook the word "preconceptions". Speculation concerning the atom and its potential as a source of energy predated Einstein and the Curies, and literature about atomic energy and nuclear existed from the late nineteenth century (Brians 4). H. G. Wells's The World Set Free, published in 1914, is generally considered the first novel to depict a nuclear war, and anticipates the discovery of plutonium and some of the effects of radiation. It is perhaps ironic that Wells's fantasy--essentially a plea for world government--appeared at the beginning of the First World War. Its subject matter looks forward to the conclusion of the Second World War as well as the dangers of the ensuing Cold War.

Thus Bradbury's "preconceptions" should not be interpreted as merely the abstract musings of a physicist. The concept of atomic energy and its military application possessed real if limited currency before the events of 1945. Granted, almost all of the literature--and here I mean imaginative literature--in which atomic weaponry figured was science fiction at its most naive--the pulp equivalent of the charmingly inept Buck Rogers and Flash Gordon serials so popular at the time.

But it is true that speculation about the exploitation of atomic energy was indeed mere speculation until the latter months of the war. Even on the eve of the Trinity test there was uncertainty, even skepticism, as to whether "the Gadget", as the first bomb was whimsically dubbed, would work. When it did, those present at the detonation felt not so much relief as awe. The physicist Isidore Rabi recalls

> ...an enormous flash of light, the brightest light that I have ever seen or that I think anyone has ever seen. It blasted; it pounced; it bored its way right through you. It was a vision that was seen with more than the eye. It was seen to last forever....It looked menacing. It seemed to come toward one.

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> A new thing had just been born; a new control; a new understanding of man, which man had acquired over nature.
>
> (Rhodes 672)

Rabi's description of the blast and the fireball as "a vision that was seen with more than the eye" aptly characterizes the extent to which this event immediately assumed mystical, even religious overtones. It was a turning point in history, the beginning of a New Age for humanity--perhaps the Last Age. From the very beginning, the Bomb seemed both to inspire and require a special form of utterance. Everyone, it would seem, knows how J. Robert Oppenheimer quoted the god Vishnu in the Bhagavad-Gita: "Now I am become Death, the shatterer of worlds." Although it has been well-corroborated, the story seems almost apocryphal. At least it has the smack of a well-orchestrated "sound-bite". Yet Oppenheimer was a student of Sanskrit, just as he was a student of the English Metaphysical poets of the seventeenth century: he drew the name of the test site, Trinity, from John Donne's Holy Sonnet X, a poem remarkable for its violent imagery ("Batter my heart, three person'd God").

Nor was Oppenheimer the only scientist involved in the Manhattan Project to be moved to poetry by the emergence of nuclear power. S. K. Allison, a physicist from the University of Chicago who helped establish the laboratory at Los Alamos, composed a verse commemoration of the creation of plutonium:

> Hail, miracle, which in these dreadful years
> We built, drawn on by hopes, and goaded on by fears.
> Hail, man-made star! God help us who aspire
> To fan spent embers left from cosmic fire!
>
> (Buck 319)

Allison continues for three more stanzas in the same academic and rather arthritic manner. It is perhaps not too snide to be grateful that Dr. Allison's true vocation lay in physics and not prosody. Nonetheless, however pedestrian and archaic Allison's modest poem is, it neatly illustrates the dilemma that most professional poets faced at the dawn of the Atomic Age: how does the literary artist develop a language that articulates and addresses the presence of the Bomb in the latter half of the twentieth century?

In his study of American thought and culture during the first five years of the Atomic Age, Paul Boyer notes that only a handful of important writers had anything to say about the Bomb (246). Three major poets--John Berryman, Robert Lowell, and Randall Jarrell--are mentioned by Boyer as at least having taken a stab at the Bomb in their verse, but reading of the poems in question shows them to be far from illuminating. They seem uncontrolled. If nothing else, however, they convey the anxiety and stark dread that characterized the early years of the Atomic Age. Lowell's "Where the Rainbow Ends" (1946) is, not surprisingly, full of apocalyptic overtones: nature has been subverted, and the sky is literally falling:

> I saw the sky descending, black and white,
> Not blue, on Boston....
>
> (Selected Poems 33)

Lowell's nightmare vision of his beloved hometown's immolation reflected the fears of many Americans in the years after Hiroshima, as America and indeed the world was seen as increasingly vulnerable. Moreover, the poem, clotted with Biblical imagery but bereft of the consolations of traditional religious certitude ("...I am a red arrow on this graph/ Of Revelations.") echoes the violence of Donne's Holy Sonnet, but offers no hope of salvation. Indeed, the central image of the poem, the rainbow (God's assurance that the world will be renewed), is ultimately obliterated. Time has finally run out for the human race.

Jarrell's "1945: The Death of the Gods" is more obscure than Lowell's poem. It is never entirely clear who is being addressed in the poem (or, more precisely, who are "the gods" that Jarrell admonishes? What do they represent?). But the poem does include a fairly direct reference to the Bomb as "the first human sun", and the poem concludes with a by-now familiar scenario of Armageddon:

> ...O warring Deities,
> Tomorrow when the rockets rise like stars
> And the earth is blazing like a thousand suns
> That set up there within your realms a realm
> Whose laws are ecumenical, whose life
> Exacts from men a prior obedience--
> Must you learn from your makers how to die?
>
> (Complete Poems 183)

Here Jarrell, like Oppenheimer, has borrowed from the Bhagavad-Gita. The image of the thousand suns also provided the German historian Robert Jungk with the title for his history of the Manhattan Project.

Taken as a whole, however, Jarrell's poem seems tentative and indirect, a rambling rhetorical question with only a vague sense of its audience, not to mention the question itself.

Berryman's "The Dispossessed" (1948) is enough to make Jarrell look like a model of lucidity. But where Jarrell's poem follows a rather ceremonious and familiar poetic format, Berryman's is a series of surreal and inarticulate outbursts, suggestive of confusion and panic:

'and something that..that is theirs--no longer ours'
stammered to me the Italian page.
(Homage to Mistress Bradstreet 24)

The disjointed stanzas and almost opaque imagery do finally give way to a clear reference to the bombings of Hiroshima and Nagasaki:

That which a captain and a weaponeer
one day and one more day did, we did, ach
we did not, They did.. cam slid, the great lock

lodged, and no soul of us all was near was near,--
an evil sky (where the umbrella bloomed)
twirled its mustaches, hissed, the ingenue fumed,

poor virgin, and no hero rides. The race
is done. Drifts through, between the cold black trunks,
the peachblow glory of the perishing sun
in empty houses where old things take place.

The passage is notable for its use of an alternative image--the umbrella--rather than the mushroom cloud, as well as its treatment of the question of guilt. The theatrical allusions--references to the stock characters of stage melodrama--further underscore a sense that traditional mores and morality are obsolete in the age of the atom bomb.

These three poems are initial reactions to the threat of nuclear annihilation, published within three years of Hiroshima and Nagasaki, possibly written earlier. For the most part--and Berryman is an exception--the imagery and to a certain extent the prosody are familiar and traditional. There are some new images--Jarrell's rockets and Berryman's umbrella/mushroom cloud, for instance--but for the most part these poets make use of recognizable points of reference. They are cautiously feeling their way through the new landscape with old, outmoded maps.

Written a decade later, Richmond Lattimore's verse is at once more sophisticated than that of his earlier counterparts, and as traditional in its imagery and prosody. There is a sense of resignation and quiet cynicism in Lattimore's verse that contrasts sharply with the near-hysteria of Lowell and Berryman: a sonnet based upon a 1936 Encyclopedia Britannica entry on Hiroshima is a piece of understated irony:

Its fame is partly due to the serene
and nearby presence of divine Bentin
on her small island, and to the belief
that she bestows an influence from heaven,
for she is god of radiance, and has been
adored by pilgrims, constantly.

(Poems From Three Decades 21)

Lattimore's poetry--largely composed between the 1950s and the 1970s--indicates that most of the standard iconography of the Atomic Age was well established. "Ikon for a Fall-Out Shelter" (1966) echoes Lowell in its premonition of universal annihilation ("Against a Gotterdammerung glow"). Lattimore has no illusions about the "haven" of civil defense: his fall-out shelter is little different from the gas chambers of Auschwitz:

...we take our lasting seats and fill
the lethal chamber whose white rats we are.

(Three Decades 180)

"Sestina of Sandbars and Shelters" (1966) is a slightly longer rumination on the same theme. In a setting somewhat reminiscent of Nevil Shute's 1957 novel On the Beach, Lattimore evokes a placid, even languid world on the eve of an unspecified catastrophe. There is an aura of lassitude and indolence, of an effete idyllic existence, a pastoral just beginning to go sour:

...we lie at ease under the striped shelter
and watch the haze and water light a world
of chairs and children all a summertime
long afternoon before the light is gone.

(191)

But a sense of impending doom soon dominates the poem ("none can win the race run against time"), and Lattimore finds solace in neither humanity nor religion ("God our hope holds out no visible shelter/from this stormblast"). His despair echoes Lowell's--there is a reference to Noah as there is also in "At the Rainbow's End", but the tone here is less emotional than in Lowell's poem. If anything, it expresses exasperation at the moral fecklessness of the human race:

And still we walk as if we still had time...
talk shop and sports and reassess the world
of art...

(191-192)

The poem ends with a particularly grim vision of a "holocaust of the human world" in which all civilized values have disappeared.

Perhaps because he was first and foremost a classicist, a translator of Homer and other ancient Greek poets, Lattimore's verse about the Bomb seems cleaner and more restrained than the work of Lowell, Jarrell, and Berryman. This isn't the case with "The Wounded" (1957), a maddeningly esoteric poem built around the myth of Philoctetes, the archer who, after being left behind on an island because of a foot wound, was brought by his fellow warriors to Troy, where he slew Paris with a shot from the bow of Herakles (itself most likely a symbol of the Bomb). In "The Wounded", Lattimore seems to call for a reversal in corrupt human values, and the eradication of militarism:

> ...When the forlorn are as kings among men
> and the large men are forgiven,
> and the dagger is a scalpel of mercy,
> may the wound sleep at last in the heel; the bomb die.
> (51)

There is much to praise in these efforts to address the Bomb in poetry, and I should hasten to add that these are by no means the only, or necessarily the very best, specimens of their kind. But certain problems remain. What these poets have articulated well is the dread, the abiding nuclear fear that has enveloped the world for the past half-century. Like Old Testament prophets, Lowell and Lattimore have apprised us of the dangers of living in a nuclear age, as have countless others who are not poets at all. Nevertheless, the Bomb itself remains somewhat distant in all this literature. It hovers, just out of sight, a deferred threat, something never fully envisioned or comprehended. Its menace has been muted under the guise of comical names such as Fat Man and Little Boy. Its physical presence--at least in repose--has been hidden underground.

It is of course inescapable that most of the literature written during the Nuclear Age would be about anxiety, would be about fear. Fear is the most palpable feature of the Nuclear Age, apart from the grisly mementos of Hiroshima and Nagasaki, which naturally serve to feed that fear. David Bradley's No Place to Hide (1948), an account of the Bikini Atoll test, and one of the earliest documents to warn about the dangers of radioactivity, expresses fear. Jonathan Schell's more recent The Fate of the Earth (1982) expresses that fear to rhetorical excess.

What of the Bomb itself? It is true that, in its millisecond of destructive incandescence, the Bomb is indescribable, undefinable. And the physical complexities of quantum physics and nuclear fission are beyond the imagination of all but the expert few. And yet the Bomb remains an entity, however menacing, that most of us wish to know better, or at least to understand. What is it, and how did it come into being?

To answer that, I propose that we look not to the poetry inspired by nuclear fear, but to a small group of works that are little known and not frequently read. I refer to a handful of novels--I know of seven in all--that deal, in semi-historical fashion, with the Manhattan Project, the top secret project established by President Roosevelt to create an atomic weapon for use against the Axis Powers. The first of them, Live With Lightning, by Mitchell Wilson, was published in 1949. The most recent of them to date, Martin Cruz Smith's Stallion Gate, was published in 1986. As works of fiction, their literary merit is uneven. Pearl S. Buck's Command the Morning (1959) is little more than soap opera, whereas Dexter Masters' The Accident (1955), while flawed, is a thoughtful and sympathetic exploration of the scientists who helped create the Bomb.

For to better understand the Bomb, one must attempt to understand the scientists. And with the exception of the title character of Stanley Kubrick's Dr. Strangelove (1963), the "Mad Scientist" is conspicuous in the literature of the Bomb by his absence. John Faustus and Victor Frankenstein simply do not make an appearance. There are men and women given over to an obsession, racked by self-doubt and professional jealousy, torn between professional ambition and private angst, but nary a lunatic among them. Even Dr. Edward Teller, who figures in Stallion Gate, the most "historical" of these novels, is every inch a gentleman.

It is the scientists in these novels, and often the non-scientists with whom they associate, who serve as the link between "us" and the Bomb. Louis Saxl, the main character in Masters' The Accident, is a young, idealistic scientist who has come to Los Alamos during the latter months of the war. The novel, and the character of Saxl, was inspired by the case of Louis Slotin, who received a lethal dose of radiation on May 31, 1946 (Boyer 307). [Slotin is also "recreated" in the character played by John Cusack in the 1989 film Fat Man and Little Boy]. There are two interconnected stories in The Accident. The first takes place inside Saxl's rapidly deteriorating mind, a combination of memory and delirium. The second concerns the doomed efforts of a sympathetic if naive army physician to save Saxl's life, while the military authorities do everything in their power to keep the story of the accident from leaking. In the end, they prevail. Masters' chief aim, in the paranoid years of the 1950s, was to lambast what many considered the fanatical concern on the part of the government with secrecy. But Masters also wants to depict the scientists, primarily through Saxl, who writes poetry and possesses a gentle, sensitive nature, as men and women of conscience as well as intellect. Much is made of the spectacular beauty of the country surrounding Los Alamos, and the rather Wordsworthian affinity the scientists feel for it. Early in the novel, reference is made to the choice of Los Alamos as the site for the secret project by "a young theoretical physicist"--clearly Oppenheimer, although never identified as such. He recalls the mesa as "a place of glory to his childhood" (40), and proposes it to the army:

> "You know," one can imagine the physicist telling the generals, "there's a place I used to camp out as a boy--" and all at once a chink opens...through which fancy can discern...the generals waring slightly underneath their uniforms...and speaking or thinking, for a moment, not of bombs out of boyhood. The secret times of that time are the most secret of all, the most everlasting private, the safest in retrospect...; and hence the physicist's proposal must have given an almost sentimental sanction to the choice of the mesa of Los Alamos...
>
> (41)

It is difficult, if not impossible, to imagine someone like Leslie Groves succumbing to such reveries. But we must remember that Masters is writing fiction, even as he attempt to point to something he conceives as a truth. By the time that The Accident was published in 1955, Klaus Fuchs had been convicted for engaging in Soviet espionage, Julius and Ethel Rosenberg had been executed for the same offense, and Oppenheimer had ben stripped of his security clearance. Scientists and intellectuals in general were suspicious characters. At worst they were atheistic agents of Moscow, at best woolly-minded and otherworldly. Masters was honestly attempting to establish the atomic scientists' credentials as human beings.

Thomas McMahon's semi-autobiographical novel, Principles of American Nuclear Chemistry, published fifteen years after The Accident, takes a less idealized, but equally human view of the scientists. More attention is paid to discussion of the technology of the bomb, and McMahon provides a valuable glimpse into the combination of collaboration and pure research that made the Manhattan Project unique. The narrator, recalling his adolescence at Los Alamos where his father was a scientist, asks the latter what it was like to be a part of the project. The father's reply is candid, but hardly idealistic:

> Whether any of us admitted it or not, we were all grateful to the circumstances of the world for having separated us from the trouble of supporting our own work. It was the first time, really, that such a thing ever happened....There were inconveniences about being so far away from Chicago or Cambridge or Berkeley or wherever we came from, but the real truth was that we were having a ball.
>
> (85)

What emerges in McMahon's novel is a sense of overweening self-interest. The colony at Los Alamos is depicted as no different in its essentials as any academic department in any American college or university. The scientists are simply more fortunate than most in being given an ideal research grant (McMahon does not seem to resent the secrecy the way Masters does). But the same sort of calculation, the same kind of ambition that characterizes Academe is seen as endemic to Los Alamos. The narrator's concluding reflection casts doubt on the overall success of the Project, at least in human terms:

> A question which often comes to me is whether it was ever proper to feel love for science. Sometimes I am convinced that this group love of science was one of the things we were trying out at Los Alamos which didn't work. And mysteriously, that is part of my parents' reconciliation: they are together again because the other thing was, after all, transient. It didn't last. Fantastic. It seemed so real, but it escaped.
>
> (245)

Martin Cruz Smith's Stallion Gate is in many ways the most successful of the Manhattan Project novels. I have said above that it was the most "historical" of the novels. By this I simply mean that, with most of the principal players long dead, Smith was free to depict historical personages. Hence we encounter Oppenheimer, Groves, Teller, Enrico Fermi, and Klaus Fuchs in the course of the novel. No doubt this satisfies a current taste for "realism" in our popular entertainment, and we should not lose sight of the fact that Stallion Gate, like its predecessor Gorky Park, is primarily an espionage novel. But Smith does manage to give it a sense of authenticity. Stallion Gate is also a resonantly poetic novel. Like Masters, Smith is transfixed by the physical beauty of Los Alamos, and the silent presence of the vanished Anasazi, whose ruins still punctuate the landscape. Moreover, the few Native Americans--Hopis and Pueblos--who coexist with the scientists and soldiers at Los Alamos provide a significant counterbalance to the workings of modern military technology intruding into the timeless world of the mesa.

The protagonist of the novel, Joe Pena, is a Pueblo Indian. He is also a jazz pianist, prizefighter, and sergeant in the United States Army, who turns up in Los Alamos as Oppenheimer's chauffeur, liaison with the local natives, and reluctant spy for Army Intelligence. As such, Smith intends Joe to be a sort of Everyman, an ordinary yet heroic individual set in contrast to the more rarified Oppenheimer. It is one of the novel's flaws that Smith lays this on a bit too thick. At various points in the novel, Joe participates in site selection for Trinity, helps transport newly processed plutonium from Fort Douglas, Utah to Los Alamos, witnesses a near chain reaction (a harbinger, actually, of the Louis Slotin accident), observes Klaus Fuchs passing secrets to Harry Gold, and helps hoist the Gadget up the shot tower at Trinity, even climbing the scaffold at one point to free some tangled cables. One senses that if Joe had not been killed at the end of the novel, he might have ended up piloting the Enola Gay over Hiroshima.

Notwithstanding this "fly on the wall" aspect of Joe's function as a character, Smith does offer a view of the events at Los Alamos that is both detailed and compact. Moreover, Oppenheimer comes across as the charismatic figure he was in actual life, as well as the seducer who persuaded people to stay on with the Project when they were having second thoughts about the morality of dropping the Bomb. In one crucial scene (the scene in which the chain reaction nearly occurs), Oppenheimer is persuading a scientist about the rightness of their cause:

> "I didn't become a physicist to learn how to vaporize Japanese." Harvey's voice rose.
>
> "None of us did." Oppy's voice became nearly tender. "But you tell a mother of a young soldier who died on the beach of Japan--and there will be many thousands of them--that you had a bomb that could have ended the war and that you chose not to use it. Tell his wife. Tell his children."
>
> (227)

But it is not the rather predictable appeal to patriotism that wins Harvey over. Oppenheimer asks Joe, who is assisting in an experiment with critical mass, for his opinion on the issue. In order to answer, Joe must physically move, and in so doing nearly sets of the chain reaction:

> Harvey stared up from his scribbling. "You did it?" he told Joe.
>
> "Me?"
>
> "The core was already near the margin of criticality. The human body is composed mostly of water--hydrogen dioxide--which reflects the neutrons. Oppy and I didn't matter. You're bigger. When you leaned over the Dragon, you triggered the counters."
>
> "You're a more unpredictable factor than I'd thought," Oppy said.
>
> "It doesn't matter," Harvey said, "we got the data."
>
> "Well, are we radioactive now?" Joe asked.
>
> "We're fine," Harvey said. "Nothing really happened."
>
> "Nothing really happened." Oppy agreed.
>
> They looked at Joe with twin scientific detachment, a sudden, palpable line between them and him. He stared back, for the first time his mind fully engaged. It was obvious that Oppy had won. What was interesting was Harvey's surrender, his relief about it.
>
> (232)

One more aspect of Joe: he serves as an intelligent layman, to whom scientists like Oppenheimer and Harvey can explain the niceties of quantum physics. And naturally, this moment of high excitement in the laboratory is all that is needed to sway Harvey over to Oppenheimer's side. If he is not Faust, Oppenheimer may be Mephistopheles.

In this scene, and in several others in Stallion Gate, the Bomb takes on a life of its own, as it evolves from plutonium ("Like a tin can of hot soup, Chief. Like it was alive.") to core (the Dragon that nearly awakes) to Gadget at Trinity ("twisting with a new inertia"). By the end of the novel it has virtually become a character, "a fat man on short legs".

Writing this essay has reminded me of how extensive, and how really very rich, the body of literature concerning the Bomb and the Nuclear Age really is. To be sure, there are countless other titles, other genres, other literary forms that remain to be read and discussed. It is a growing body of literature, and I do believe that it has gained in insight and in eloquence over the past few decades. Its task is formidable, possibly impossible--to ponder the unthinkable, to articulate the indescribable, to create its own artistic and intellectual fusion of image and utterance. Ancient myths need not give way to modern realities; neither can human values wither in the light of scientific abstractions. The Nuclear Age is merely a part of the human era, and while poets and physicists coexist, their particular languages must ultimately complement each other.

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INTERDISCIPLINARY TEACHING IN AN INTERDISCIPLINARY PROGRAM: UNC ASHEVILLE'S HUMANITIES PROGRAM

Margaret J. Downes

For the last twenty-six years faculty at UNCA from a number of disciplines have taught in our Humanities Program. Two of the major outcomes of their participation are their realizations, tacit or expressed, that, first, the label "academic discipline" is in many important ways an administrative and culture-bound convenience rather than a reality of mode or of content; and that, second, more often than not, selections from the best that has been thought and expressed throughout the ages cannot neatly be categorized as belonging to any one discipline or another. These realizations are two sides of the same coin, and we and our students view them more easily now, from the broad sweep of historical and multi-cultural perspectives offered by the four courses comprising the Humanities Program. How did we come to this state of things? And what effects does it have, not only on our teaching the Humanities Surveys, but also on our teaching courses in our own disciplines, and on our communications with each other in all walks of campus life?

First, let me provide some background on the Program. All students at UNCA, as part of their rather stringent core-course general education requirements, must pass the four Humanities courses. The first, "The Ancient World, "is to be taken second semester freshman year; the next two, "Medieval and Renaissance, " and "The Modern World," are planned for sophomore year; and the last, "The Future and the Individual," is a senior-level requirement which deals with materials from the 1950's ("contemporary" to some of us!) to the present. The focus of all sections of all of the courses is on primary source written materials (some excerpted, some read in entirety), and on directed discussions of the ideas found therein. We draw up a common syllabus for each course. Discussion sections meet twice a week; all three to four hundred students taking a course during a semester meet together once a week for a large-group lecture by one of the faculty. These lectures are most often topical--on Greek art, for example, or the Industrial Revolution, the importance of Freud, or Contemporary Ethics--and each one provides a "kick-off" for the small-group discussions in the week that follows.

Like the students in any of the discussion sections, the fourteen or fifteen faculty members teaching a Humanities course come from a number of departments--at present, thirteen departments on campus contribute their best teachers to the program; there are no "Humanities teachers," *per se*.

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We have teachers from the usual humanities areas--from Departments of Literature, Philosophy, and Foreign Languages, for example--but also from most of the social sciences, from Physics, Biology, and from Management. There is, of course, some healthy fear and trepidation on the part of a first-time Humanities teacher, for even those whose graduate degrees are in traditional humanities areas are by no means conversant with the many works dealt with in each course; and those whose degrees are in Management or Physics, for example, well-read and generally educated though they may be--these folks sometimes feel they are rushing in where those with good sense have feared to tread.

Two factors have alleviated these well-grounded fears. First, with the help of an NEH grant five years ago, UNCA established an invaluable system of internships for anyone teaching any of the four Humanities courses for the first time. The year just before that happens, that person is given three hours reassigned time (out of our usual course-load of twelve per semester) in order to prepare: they read the texts assigned on the core course-syllabus; they read beyond that syllabus to sharpen and broaden their view of the works' contexts; they sit in on the discussion sections of all of their colleagues then teaching the course; they attend the weekly large-group lectures; and they participate in the weekly planning and discussion sessions of the faculty for that course. In sum, they go through the course, as part-teacher and part-student, as painlessly as possible, in the process gaining an interdisciplinary perspective which is evidenced in their teaching, whether Humanities courses, or those in their own departments.

As our Humanities Program has grown and strengthened, due in no small part to the contributions of its interdisciplinary and ever-renewed faculty, it has (as one might expect of a successful program) gained the approval of the administration. This is the second reason why good teachers usually want to join the Humanities teams: their participation is noted, and rewarded, come the time for merit-increases in salary. Six years ago Humanities became the first of UNCA's "Areas of Distinction," a designation given annually by the Chancellor--along with a substantial increase in budget--to programs which not only hold promise of increasing the academic vitality of the school, but which also promise to positively sharpen our public image. Although the Humanities Program is by no means perfect (the syllabi are annually revised, for example), it's good enough to have contributed heavily to UNCA's present and publicized focus on interdisciplinarity. We now have, besides the four Humanities courses, an interdisciplinary Master's in Liberal Arts Program, as well as several interdisciplinary courses throughout the university, often team-taught by faculty from departments as apparently different as Biology and Literature.

When you teach Humanities at UNCA it is impossible to remain isolated from faculty outside of your discipline. They sit in on your classes; you hear them lecture, and they hear you; you meet with them once a week to discuss upcoming readings. And you inevitably come to find that you have much in common, including thoughts and vocabulary, and that their concepts and preconceptions, though apparently strange, are cousins to your own. When, seven years ago, we first started having our weekly meetings, things were rather stiff: no one wanted to admit ignorance, though all deeply felt it. Pretty soon, however, the ice melted and questions and answers began to flow. Oftentimes, new approaches and interpretations are suggested. By thinking together, we break new ground, coming up with ideas which are more pan-disciplinary, actually, than interdisciplinary. These are the ideas, we find, which our students find most intriguing, for none of them, by major, feels excluded from participating in a discussion of pan-disciplinary ideas: we ourselves are more open to several points of view on meaning and truth, and thus can better interest our students in their assignments, and also respond more openly to their suggested interpretations.

Oftentimes these pan-disciplinary ideas have to do with basic questions about the human condition: what, for example, is the relationship of the individual to him- or herself? to society? to Nature? to deity? Or, the ideas focus on cultural paradigms, which allow us insights into how and why people during a particular era in a particular place thought the way they did. The texts we end up choosing including on our syllabi reflect this pan-disciplinary thinking. For example, we assign Galileo's letter (1615) to the Grand Duchess Christina, the mother of his patron, defending his observations and conclusions against the established paradigms of Church-dominated early 17th-century Europe. His thoughts are scientific; they are also theological, psychological, sociological, and literary, for he is a man speaking most eloquently and fervently about locating himself and his ideas in a whole world-view. By no means is his intended audience only the Duchess, or the Church, or scientists: his ideas are intended for all intelligent and open-minded thinkers of his time. Darwin's The Origin of Species, too, for example, cannot accurately be categorized by discipline. Certainly his ideas about evolution and natural selection are essential to biologists, but they are none the less so to theologians, to sociologists, and to reflective industrial managers, then as now; his writing tells us much about his particular cultural context, and in doing so helps us to contemplate our own, outside of the limitations imposed by disciplines. One further example: when, in the third Humanities course, we talk with each other and our students about traditional African art and music, we come to realize that their art is as much about religion and psychology and social bonding as it is about aesthetics. Another culture's disciplines may be drawn along lines dissimilar to our own; and this facilitates our ability to cross these lines, whether we are thinking about that culture or our own. In short, we find ourselves increasingly able to appreciate the fullness of great thoughts, in whatever medium, from whatever culture, when disciplinary constraints are removed.

As time goes on our Humanities Program is becoming increasingly pan-disciplinary and multi-cultural. Part of this is due, of course, to the tenor of these times; part is due to our excitement over teaching and learning in these ways. We find ourselves able to conduct all of our courses more effectively; we find our research refreshed; we even find ourselves more comfortable, efficient, and collegial at meetings of whatever sort, campus-wide. The efforts we have put forth in forming and constantly reforming UNCA's Humanities Program have been enormous, but certainly fruitful: the resultant interdisciplinarity, campus-wide, is perhaps the most outstanding and pleasurable thing about being at UNC Asheville.

Appendix: Humanities Syllabi, for discussion at presentation.

TEAM TEACHING AND INTERDISCIPLINARY COURSES

JoAnn Gesiakowska
Betta LoSardo

Introduction

This paper will discuss the value and techniques of team teaching in interdisciplinary studies. The series of courses on European history and the visual arts, *Eons and Arts: Manifestations of Culture, which is taught at DePaul University's School for New Learning,* models collaborative learning. The goals of these courses are to blend disciplines, to compare perspectives, and to give students access to fields. This paper will show how these goals are accomplished, and how other courses can be adapted to this model. Furthermore it will provide a learning rationale for an interdisciplinary approach to western civilization courses which helps students put this monolith of liberal arts education in perspective.

At DePaul University's competence based college for adults, the School for New Learning (SNL), the concept of interdisciplinary learning takes on new meanings. Because the curriculum is focused on competence rather than on disciplines, teachers are forced to examine their topics with respect to their underlying purposes and assumptions, in light of their applications, and considering their relationships to other areas within the liberal arts.

The Courses

How do adults solve problems? Consider purchasing a home, choosing a school for your children, or something as simple as deciding on a vacation spot. What are the steps you take to analyze the situation? Most adults do not look at a single dimension of any decision. Children do, and as a result our education system has developed around one dimensional analysis. We teach mathematics, social studies, or history. Unfortunately, this same method of instruction has carried over to college level instruction, particularly in introducing students to new topics. We teach Introduction to Art and Survey of History to beginning students and save the interdisciplinary material for those students who are already schooled in the vocabulary, facts, and goals of the discipline. This discipline based method is also used to teach adult students, who have presumably learned integrative thinking from their experiences.

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It is by design and not by accident that some graduate schools of business have adopted the case method as a learning tool to train business leaders. In those case studies, the student must assess not only the financial picture of a company, but also its manufacturing potential, its need in the marketplace, its placement in the community, its management style. These programs have altered curricula to reflect the manner in which adults process information.

In addition to offering one subject courses, we in higher education rarely model collaboration to our students. Yet, in the world outside academia, adults are called upon to collaborate and negotiate. Students who have the advantage of witnessing two instructors combine disciplines and compare perspectives are seeing a problem solving model with which they are already familiar. It is the collaborative, interdisciplinary approach by which business and communities are run.

As teachers in a competence based college program for adults, the authors of this document were mutually interested in the layers of meaning in the current controversy over the definition of art and its meaning within culture. The interdisciplinary courses which arose from these discussions address the relationship of the social and political history of western culture with contemporary art work. The courses are constructed around the question, "Does art reflect the dominant values of a culture, or does art change values?" The purpose of this question was not so much to help students find a definitive answer as to sort out the various factors which contributed to their reactions.
The course evolved into two segments covering ancient Egypt through the Renaissance and the Reformation through post World War II Europe respectively.

Because the School for New Learning takes a competence based approach to liberal learning, assessment in this course follows a pattern which allows - in fact, demands - interpretive thinking on the part of the students. The School's competence framework is distributed over five areas, called domains, of liberal learning. Three of these domains - the Human Community, The Physical World, and the Arts of Living - cover content material generally associated with liberal arts curricula. The fourth domain, the World of Work, is dedicated to students' individual concentrations. The fifth domain, Life Long Learning, emphasizes academic skills such as writing as critical thinking, but also addresses students' ability to assess their own academic needs, to define goals, and to design plans to attain them.

The Eons and Arts series meets competencies from the three liberal arts domains. Students choose two competencies and tailor their projects accordingly. The choices include:

Can evaluate the contributions of the social institutions to the welfare of the communities they serve;

Can employ techniques of forecasting to project trends and anticipate the future;

Can compare various regions of the earth with respect to the quality of life afforded by their features;

Can explain the function of popular or folk arts in the transmission of culture and values;

Appreciates the values expressed in art, literature, or entertainments.

In addressing competence and the School's competence framework rather than disciplines, students have ready access to the criteria by which they will be assessed. Students are aware that factual knowledge is important, but they also know they must reach some conclusions of their own about the material. "Explaining the function of popular art" implies defining those terms and then suggesting some application of knowledge. Assessment is based on students' knowledge, and on their ability to make something useful of that knowledge.

Furthermore, the competence method also gives students access to fields which might otherwise remain out of reach. Relatively few students seek out art courses on their own. However, seeing art in relation to history clarifies the role of art, and makes it appear less obtuse. This experience itself prepares students for other ventures into fields perceived as impractical.

Students are encouraged to learn from one another as well as from the teacher. While students may not be experts on the content of the course as they begin the experience, they come to realize that they do indeed have some knowledge about the topics. This process is included in other educational settings. Students in professional graduate programs make use of study groups to learn the material. Cooperative education is gaining precedence at the elementary level. Faculty collaboration can model this process. For example, students can define Impressionism; or they can fix the Reformation in time. What one students knows can be passed on to others. The teacher is more facilitator than content expert. To take advantage of the range of knowledge and experience in each course, faculty design group projects and discussions. Chicago's rich resources provide opportunities for students to see the art they are dealing with first hand. Chicago's Art Institute, and the Oriental Institute at the University of Chicago are the major field resources for the Eons and Arts series.

The study of Western culture presents some wonderful opportunities to integrate factual knowledge with current themes in social change. This series aims at helping students see a succession of time periods as they interrelate and to build a perception of history as a field. Ideally, this experience gives students some models and some vocabulary for assessing their own time period. In order to accomplish these aims, students must, with the assistance of faculty, define the purposes for studying history and art. It is particularly important that students consider in this process the value they place on the relativity of truth in these fields. In other words, students must give up their propensity to rely on the experts for both data and its interpretation, that is "truth."

Thus the most important question put to students is "What lessons does History teach?" Students are offered models to use in analyzing historical events to evaluate what learning can be drawn from them and applied to current problems. The model includes queries such as "What are the similarities and differences in two historical situations?" and "What are the critical issues of each situation?" Similarly, students are encouraged to redefine their perceptions of art. Critical issues include addressing the perceived differences in art and craft and the need in culture to produce representative artifacts. The rise of various schools of art can be paralleled with political, social, economic, or scientific change. For example, the effect of the popularization of photography on painting is a fruitful topic for discussion in the second course in the Eons series.

In developing and teaching this series of courses, we have learned that faculty collaboration provides students with the best of both worlds. Not only do faculty members bring specific expertise to the courses, but they also model integrative thinking, that is, the multi-dimensional problem solving process discussed earlier in this document. By studying a subject t form several perspectives, students are required to evaluate several aspects of a course of study. Furthermore, from the teacher's point of view, gaining insight from other disciplines helps put one's own training and bias in perspective.

Students gain immensely from this approach because they witness this struggle for understanding which is not always evident in the traditional discipline based approach. This is particularly true in survey courses which are designed to present the fundamentals of a field. All too frequently students feel incapable of questioning information in the survey style course. Their opinions about World War II, or their gut reactions to Michelangelo seem inconsequential in the face of the amassed, official data on these topics. Our courses encourage them to reach their own definitions, to assess their growth in their knowledge about these fields, and thus to express their views with appropriate vocabulary and informed thinking.

Students and faculty can begin to look beyond the traditional limits of a discipline to the fringes to discover how other disciplines might color it. For example, one student brought a lava lamp as an example of a cultural artifact of the 1960s. As faculty, we were not willing to give a definitive reading on the lamp's characterization as art. Nonetheless, the discussion which ensued on the nature of art, on the character of that period in history, and on analogous artifacts in western culture was well worth the venture into the ridiculous.

Adapting the Model

For faculty who are interested in revamping or developing course in this manner, we suggest the following organizing questions:

- Describe the point of your discipline. Why would students find the information you provide useful? What will they be able to do as a result of your course?

- Describe how your discipline fits into the scheme of liberal learning. Why is it important that students have the information you make available? In what way will they be more liberally informed after the experience? How does it relate to other fields?

- Remind yourself that you once had questions and dilemmas about your field. What were they? What student questions have stymied you in class?

- What interests you beyond the confines of your discipline? How is this material related to the course you would like to develop?

Once faculty have accepted that working on the margins of a field can be productive, the possibilities involved in calling on students' experience become obvious. While students may not be knowledgeable about the range of the work of Picasso, they do recognize some of it and have some opinions on it. Knowing this can help you clarify some misconceptions and build on some solid foundations.

In the planning stages, faculty can access some of these attitudes through focus groups and surveys. The Eons series grew out of these methods, plus several years' experience with adult learners, and consequent familiarity with their interests, preconceptions and learning needs.

It is also important to divide responsibility and emphasis equally. It is certainly easier to make decisions on your own. Nonetheless, any hesitation in sharing the podium with your colleague will weight the material in the perception of your students.

In choosing course material, it is helpful to avoid information which is interpretive in nature. Original writings of given periods and abundant reproductions form the basis for readings and other course material in the Eons series. Field trips and other hands on experiences provide more fodder for students' growing catalogs of factual information. Rather than being dictated by the experts, interpretation should come from the students themselves.

It is obvious that in a flexible environment like the one provided by the School for New Learning, this type of learning situation is not only possible, but encouraged. Nonetheless, it can be replicated in any environment where faculty are willing to act as conduits to liberal learning, to set practical goals, to look beyond the traditional means of presentation, and to work cooperatively with other faculty and with students.

Conclusions

The Eons and Arts: Manifestations of Culture series has experienced some measure of success in providing the School for New Learning's adult student population with a unique approach to western culture. It has a reputation for developing students' critical thinking skills. It has also provided a good collaboration model for the School's faculty, and has served to link resident faculty with the rich resources of the School's visiting faculty pool. Current plans for the series' growth include application to students who are in the advanced stages of the program, and development of individualized programmed learning components which will cover various historical and artistic periods.

CULTURAL FEMINISM REVISITED: AN INTERDISCIPLINARY APPROACH, MAKING USE OF PHILOSOPHY, ANTHROPOLOGY AND PSYCHOANALYSIS

Dennis Hudecki

In this paper, I want to defend a line of feminist thought that is best characterized as "cultural feminism". What prompts this paper is the recent tendency in feminist textbooks to collapse the category of cultural feminism into the "Marxist/socialist" or "radical" categories.[1] I argue that this is a mistake and that, among other things, cultural feminism provides a more satisfactory analysis of the ultimate causes of sexism (and possible solutions to it) than do the Marxist/socialist or radical forms of feminism.[2] My approach consists in calling attention to two contemporary thinkers who I believe make important contributions to cultural feminist thought, namely, Sherry Ortner, an anthropologist, and Jean Baker Miller, a psychoanalyst. I will argue that their views, read together, form the basis of a strong line of feminist thought and that this line of thought represents a renewed form of "cultural" feminism.

First: a little history. Cultural feminism began in England and the United States in the late 19th century as a revolt against liberal feminism.[3] Liberal feminism, one might say, looks at the minds of women and men and sees no differences. Thus it stresses the equality of the sexes and holds up "equal opportunity" as its highest goal. Cultural feminism, however, looks at the whole of the self and sees great differences between the sexes with regard to their biology, psychology and history. Cultural feminism rejects "equal opportunity" as the highest goal because it claims that liberal society (what, today, it would call "the rat race") is not an ideal or admirable society; rather, such a society has deeper economic and cultural problems, regarding its treatment of women, than just a lack of equal opportunity. Liberal society, left alone, becomes governed by the male-dominant values of competitiveness, individualism and super-efficiency. For the cultural feminist, the highest goal is a cultural (including economic) transformation, with a view towards the creation of a society based more on care and cooperation.

This wider cultural revolt has, in the 20th century, split into three different approaches: Marxist/socialist feminism, radical feminism and cultural feminism, itself. (See Appendix No.1.) Each of these feminisms, it should be noted, is especially good at weaving the insights of the other

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feminisms into its own perspective. My contention is, however, that what most distinguishes cultural feminism from not only liberal feminism, but its two sisters, radical and Marxist/socialist, is its analysis of the *causes of sexism*. Its account is so strong and so important, I argue, that it should not be confused with radical or Marxist/socialist feminism.

Let me now turn to Ortner. The paper of hers that I want to discuss, "Is Female to Male as Nature is to Culture",[4] written in 1974, has had a major impact on feminist theory. Among other things, it renews in a new and forceful way the analysis of female subordination that de Beauvoir provided forty years ago in *The Second Sex*. Since Ortner explicitly uses some of de Beauvoir's conclusions as premises in her argument, I will refer to de Beauvoir where appropriate in my discussion of Ortner.

According to Ortner, women have been treated as second class citizens in every known society. This phenomenon of female devaluation, she notes, comes in many different and sometimes contradictory forms, varying from culture to culture, or in one culture over different periods of time. Yet despite this diversity, Ortner is willing to make the following claim: "I would flatly assert that we find women subordinated to men in every known society". (70)

Ortner rejects the claim made by some feminist thinkers, including Marxist feminists, that there were at one time either egalitarian or matriarchal societies. Her own anthropological studies, as well as others that she cites, show that each of the societies that have been held up as being egalitarian or matriarchal have some or all of the following indicators of women's devaluation:

1) a cultural ideology that explicitly devalues women;

2) symbolic devaluation; for example, the interpretation of menstruation as a pollution or contamination, which posits the need for sacred purification rites -- rites that can only be performed by men; or

3) female exclusion from the highest political councils.

From her studies, she concludes that female subordination has until the present day been a universal phenomenon.

Ortner claims that we cannot really understand particular cultural manifestations of female subordination without understanding its deep, universal causes. An attempt to rid this or that society of sexism without understanding the problem, she argues, is doomed to lead to failure and frustration. Ortner characterizes the depth of the problem well when she says:

> The universality of female subordination, the fact that it exists within every type of social and economic arrangement and in societies of every degree of complexity, indicates to me that we are up against something very profound, very stubborn, something we cannot rout out simply by rearranging a few tasks and roles in the social system, or even by reordering the whole economic structure. (67-68)

Her goal, she says, is to

> try to expose the underlying logic of cultural thinking that assumes the inferiority of women; I try to show the highly persuasive nature of the logic, for if it were not so persuasive, people would not keep subscribing to it. (68)

One possible explanation of the universal devaluation of women is biological determinism. According to Ortner, however, this theory will not do. No good reason has yet to be found for saying that women's biology makes them naturally subordinate to men. The real question, she thinks, is why the biological differences between men and women have almost universally been interpreted in ways that imply female inferiority.

Is there any other "universal" that can be called upon for an explanation? Ortner thinks that there is. She asks, in effect: what does every culture -- east, west, north, south, contemporary and ancient -- have in common? Her answer: culture, itself. Each culture busys itself by building and maintaining itself, as a culture. Each culture, Ortner claims, is busy building and maintaining a meaningful *human* world on-top-of or along-side-of and sometimes opposed-to, the *natural* world.

With this, Ortner is in a position to state her thesis. Her thesis is that women are identified with, or are a symbol of, something that every culture -- culture as such -- devalues. Women are identified with something that every culture defines as belonging to a lower order of existence than itself. What is this "something" that every culture devalues? "Nature", she says. The very *telos* of culture is to overcome or transcend "nature", and Ortner's thesis is that culture perceives women as being more identified with, closer to and more symbolic of nature than are men. Conversely, she argues, every culture perceives men as being more helpful to culture, and more identified with its projects, than women. Thus, according to Ortner, every culture devalues women, relative to men.

Why does culture see women as being closer to nature and farther from culture than men? Ortner thinks that there are three aspects of women and their lives that give rise to this perception: (1) women's bodies, (2) the social roles that women's bodies tend to place them in, and (3) the psychic structure that seems to have formed in women as a result of their social roles. Let us look at each in turn. What is it about women's bodies that seem to place them closer to nature than men? The answer: the fact that they are equipped for reproduction. Ortner, on this point, accepts de Beauvoir's analysis and quotes her as saying: "The female, to a greater extent than the male, is the prey of the species."[5] According to de Beauvoir, the breasts, ovarian secretions, menstruation, pregnancy and childbirth all deplete a woman's strength and energy. As Ortner puts it:

> It is simply a fact that proportionately more of woman's body space, for a greater percentage of her lifetime, and at some -- sometimes great -- cost to her personal health, strength, and general stability, is taken up with the natural processes surrounding the reproduction of the species. (74-75)

These functions, she says, seem to constitute a kind of enslavement to nature, as opposed to culture. The woman's "animality", says de Beauvoir, "is more manifest". (74) Men seem more free, physiologically, to take up the projects of culture. According to de Beauvoir, women are more associated with the merely natural and repetitive activity of reproducing the species, while men are associated with transcendental activities -- i.e., those activities that are uniquely human and which rise above "the natural". De Beauvoir goes on to say:

> For it is not in giving life but in risking life that man is raised above the animal; that is why superiority has been accorded in humanity not to the sex that brings forth but to that which kills. (75)

One further point on this issue: both de Beauvoir and Ortner argue that women have almost universally accepted culture's evaluation of itself as higher than nature. As Ortner puts it:

> Women have followed out the logic of culture's arguments and have reached culture's conclusions along with men. (76).

As de Beauvoir puts it:

> For woman, too, ... feels the urge to surpass, and her project is not mere repetition but transcendence towards a different future.... She joins the men in the festivals that celebrate the successes and victories of the males. Her misfortune is to have been biologically destined for the repetition of Life, when even in her own view Life does not carry within itself its reasons for being, reasons that are more important than life itself. (76)

The second reason that Ortner gives for culture's tendency to perceive women as closer to nature has to do with the social roles that seem appropriate for women to adopt, given their bodily functions. According to Ortner,

> Since the mothers's body goes through its lactation processes in direct relation to a pregnancy with a particular child, the relationship of nursing between mother and child is seen as a natural bond.... Mothers and their children, according to cultural reasoning, belong together. (77)

Furthermore, says Ortner, the mother seems to be the obvious person for the task of child care beyond infancy, since according to cultural logic, child care seems to be a natural extension of the nursing bond. This, says Ortner, seems to place the woman in the home.

But culture, according to Ortner, sees this closer association to the domestic circle as more evidence for its belief that women are closer to nature, and farther from culture, than men. First, children themselves are not yet fully developed human beings. Second, the home is a sort of conversion place from nature to culture. According to cultural logic, women perform lower-level conversions from nature to culture -- e.g., teaching and socializing younger children, cooking, etc. -- while culture, proper, is left for men. Cooking, for example, involves the transformation of the raw into the cooked. Yet, as Ortner points out,

> When a culture (e.g. France or China) develops a tradition of _haute cuisine_ -- "real" cooking, as opposed to trivial ordinary domestic cooking -- the high chefs are almost always men. (80)

Finally, the psychic structure that women have acquired in their closer association with home-life is more particular, concrete and person-oriented than the male psyche. Her association with children leads her to a less mediated way of relating. Men, on the other hand, tend to relate to people more remotely and abstractly in terms of their formal, social roles, e.g., doctor professor, executive, etc. This again, however, reinforces the cultural tendency to see women as closer to nature than men, and therefore inferior to them; culture dearly values its objective, social and formal distinctions and finds it subversive to its interests when they are bypassed.

I wish to make one observation about this analysis and then deal with an important question that emerges from it. The observation is this: no one has to accept culture's evaluations of males and females, or anything else that cultural attitudes declare to be true. Often culture is harsh, heartless and unjust; sometimes its values are racist. At times, it devalues the best and most precious of human achievements. The "cultural logic" that Ortner articulates is _fallacious_ at almost every turn, and its use of its main categories "nature" and "culture" is _highly questionable_. For example, there is no moral or biological imperative for a woman to have babies. Second, there is no reason to say that childcare, after the nursing period, is naturally the mother's task. It could just as easily be said that child care is the couple's task, with the state, too, required to play a large role in the areas of health, education and day-care. Third, it is wrong, I think, to say that women's biology places them closer to nature than men. It may be true that a woman is, in an important sense, closer to her *body* than a man. But this does not make her less able to transcend nature than men. Instead, the opposite is true. Her being closer to her body is a potential advantage, in the sense that "body-awareness" is a strength, not a weakness. Finally, many environmental thinkers question whether there is a clear cut distinction between "nature" and "culture". This "logic" has power then, but only at the level of appearance and perception. On the level of truth and substance, it is a paper tiger.

Having said this, a crucial question still remains: if culture is the cause of sexism[6] and culture has so far been a universal reality, why then will it not always be the case that sexism exists? I believe that Jean Baker Miller's book, *Toward a New Psychology of Women*,[7] provides us with the answer. If Miller is right, culture may actually be *waking up* to the errors of its ways regarding women. The single biggest turning point has been the influence that Freud and psychoanalysis have had on our culture. Let us now take a glimpse at Miller's argument and the hope it inspires.

Miller begins her argument with an analysis of the psychological effects on women of their having been in a subordinate position to men throughout history. Women have had throughout history to clean up after everyone, service men sexually, raise families and be the "emotional carriers" for the race as a whole. (22-23) Men, meanwhile, as dominants, tended to take on for themselves tasks high above the emotional knitty-gritty -- tasks that demanded from them their intellectual, managerial and abstract problem solving skills. Thus throughout history, Miller argues, women have been situated not just closer to the body, but to the messy, disturbing and dreaded aspects of human emotional reality that are body and sex related.

Miller sees deep significance in all of this. She is a Freudian, but she uses Freud's categories in a new way. Freud claimed that human culture was built upon repression; it wanted the messy, disturbing and dreaded aspects of experience to simply go away so that it could get on with the business of building and enhancing itself. But as Miller puts it, and here is how she reinterprets Freud, culture not only repressed these uncomfortable aspects of human experience, but also the *social group* that seemed most associated with these aspects: women. (22) Freud argued that society was headed toward a massive nervous breakdown unless this repression, to some extent, was lifted. What he did not realize, says Miller, is that in uncovering aspects of experience hitherto hidden, he was at the same time uncovering, acknowledging and valuing *women's historical reality*. Thus, for Miller, psychoanalysis has been a positive development for women. Without realizing it, says Miller, Freud was in effect saying that society's survival depended upon liberating that part of the self to which women have always been historically closer and integrating it more into the public domain.

Miller, like Freud, believes that the excessively repressive, male-dominant way of conducting ourselves has now run its course. (It may or may not have been necessary and effective at one time.) Now our society is on the verge of running out of control. Our time is characterized, according to Miller, by pervasive injustice, alienation and increasing numbers of broken relationships; furthermore, we cling to an almost superstitious belief in the power of science and technology to solve our most pressing personal, economic and political problems. The world, Miller thinks, is need of a fuller vision, and new capacities. (24)

Miller's thesis is that women as a group, due to their history as subordinates, are more able than men to provide this vision and these capacities. There are potential strengths in women, just waiting to be recognized and tapped. (See Appendix No.2.) The hope is that culture will recognize that in order to survive it will have to stop devaluing women and instead begin drawing on these as yet untapped potentials.

This, then, ends my interdisciplinary defence of the category of "cultural" feminism. I have argued that no other form of feminism has the capacity for this Ortner/Miller-type of an analysis.

APPENDIX NO. 1

FORM OF FEMINISM	CHARACTERIZATION OF SEXISM	ULTIMATE CAUSE OF SEXISM	FLAWS IN THE CAUSAL EXPLANATION OF SEXISM
Liberal	Inequality	Failure to apply rational principles (e.g., human rights theory) in a consistent way	(a) does not explain the continued sexism in even the most liberal of societies (b) too uncritical of male-dominant values that permeate the whole culture of a liberal society.
Marxist/Socialist	Exploitation of surplus labour, especially women's domestic labour, by the ruling class (which consists mostly of men)	Establishment of private property and the subsequent patriarchical takeover of the surplus value of women's work.	(a) no evidence of non-patriarchal societies, even before the rise of capitalism (b) does not explain the continued sexism in highly socialized countries (e.g., China and the U.S.S.R.).
Radical	Male gender role dominance, supported by economic dominance, violence and terror (e.g., rape)	Male imperialism	(a) does not explain women's active promotion of sexist values (b) prone to a racist-like sensibility towards women (all good) and men (the enemy).
Cultural	Male gender role dominance, supported by both men and women under the sway of sexist cultural attitudes	An almost universal "cultural logic" that devalues women	It perhaps posits sexism as an unchangeable, universal cultural phenomenon. (I argue that it does not.)

APPENDIX NO. 2

Here is a list of potential strengths that Miller claims women have developed as a result of their history as subordinates:

1) Greater awareness of the body and how it affects the whole person;

2) Greater awareness of the emotionality in all situations;

3) More attuned to change and more able to tolerate it;

4) Lesser tendency to objectify people, work, experiences and sexuality;

5) Better at interpersonal relationships;

6) Greater tendency to build a climate of cooperation;

7) Greater tendency to serve and care for others;

8) Greater sensitivity to the relatedness of all things, including people, the environment, the body, emotions, mind and spirit;

9) More able to admit dreaded feelings, such as the feelings of helplessness, weakness or vulnerability.

Endnotes

1. Cf., for example, Sandra Burt, Lorraine Code, Lindsay Dorney, eds., Changing Patterns, (Toronto: McClelland and Stewart Inc., 1988); Alison Jaggar and Paula Rothenberg, eds., Feminist Frameworks, (U.S.A.: McGraw-Hill, 1984); Sharon Bishop and Majorie Weinzweig, eds., Philosophy and Women, (Belmont, California: Wadsworth, 1979); Mary Vetterling-Graggin, Frederick A. Elliston, Jane English, eds., Feminism and Philosophy, (New Jersey: Helix, 1985); Rosemarie Tong, Feminist Thought, (Boulder, Colorado: Westerview Press, 1989); Lengermann and Wallace, Gender In America, (New Jersey: Prentice-Hall, 1985). A refreshing exception to this tendency is: Josephine Donovon, Feminist Theory, (New York: Ungar, 1985).

2. In no way am I assuming that liberal, Marxist/socialist, radical and cultural exhaust the important categories of feminist thought. Such categories as religious, existential, psychoanalytic and postmodern feminism are not only useful, but necessary. For on especially insightful discussion of some of the weaknesses or strengths of cultural feminism, cf. Linda Alcoff, "Cultural Feminism Versus Post-Structuralism: The Identity Crisis in Feminist Theory", in Malson, O'Barr, Westphal-Wihl and Wyer, eds., Feminist Theory in Practice and Process, (Chicago: The University of Chicago Press, 1989), pp. 295-326.

3. Some early "cultural" feminist works are: Margaret Fuller, Women in the Nineteenth Century, (1845); Matilda Gage, Woman, Church and State, (1893); Elizabeth Cady Stanton, The Woman's Bible, 2 Vols., (1895 and 1899); Charlotte Perkins Gilman, Herland, (1915), The Home (1903), Women and Economics, (1898).

4. Sherry Ortner, "Is Female to Male as Nature is to Culture", in Rosaldo and Lamphere, eds., Women, Culture, and Society, (Stanford: Stanford University Press: 1974). Further references to this article follow in the text.

5. Simone de Beauvoir, The Second Sex, translated and edited by H.M. Parshley, (New York: Knopf, 1953), pg. 73. Further references will refer to citations from Ortner (see, above, endnote #4) and will follow in the text.

6. When I say that culture is the ultimate cause of sexism, I do not intend to imply in any way that the individual is not responsible, morally, for having internalized culture's attitudes.

7. Jean Baker Miller, Toward a New Psychology of Women, 2nd edition, (Boston: Beacon Press, 1986).

WAYS OF TEACHING, WAYS OF LEARNING IN THE INTERDISCIPLINARY CURRICULUM

Candace Klaschus
Virginia Hale
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The All-University Curriculum at the University of Hartford is a general education curriculum that seeks to develop students' ability to learn, instills the desire to learn and sees learning as a lifelong endeavor. Through interdisciplinary courses emphasizing classical and contemporary knowledge, this curriculum focuses on the core of learning that is essential for the well-educated adult. All students in baccalaureate programs of the University of Hartford are required to take at least four All-University Curriculum (AUC) courses during their four years - one course from four of the five breadth categories. Each school and college of the University determines which of the four categories are required for its majors. The five breadth categories are: Living in a Cultural Context - Western Heritage; Living in a Cultural Context - Other Cultures; Living in a Social Context; Living Responsively to the Arts, and Living in a Scientific and Technological World.

Because the All-University Curriculum is designed to promote an understanding that there are relationships among and across disciplines, just as there are relationships among and across cultures, active, involved learning has become a critical component of the curriculum. Drawing on three of the eighteen interdisciplinary courses comprising our curriculum we will present a range of options that have proven to engage students in the learning process.

From the course "Discovering America," which blends the disciplines of history, literature and sociology, we will demonstrate an array of projects that serve as alternatives to the traditional research paper. From the course "Other Cultures through Literature and Film," which blends the disciplines of anthropology, film, literature, we will illustrate assignments used to teach humor across cultures and assignments that can be

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used for student-led discussions. In "A Western Heritage," which blends philosophy, history and literature, we will discuss two books that successfully move the course from a traditional and somewhat exclusive view to a more inclusive vision of western heritage.

"Discovering America II: 1865-1945" is an interdisciplinary course that investigates American culture from the Civil War through World War II. As you will see from the discussion that follows and the handouts, after teaching the course once I decided that such a task was impossible--the time period is too long, especially for such a complex era--so I no longer follow the strict 1865-1945 time frame. Because of the nature of the materials I now include, the course begins in the late 1830 and goes to about 1929. In addition, I should mention that "Discovering America II" is the second of a three-course sequence. "Discovering America I" covers the period from 1607 to 1865, and the third course goes from 1945 to the present. I have never taught either of these two courses, but I suspect I would tamper with the time frames on them as well. Those of us who teach these classes are in the process of reorganizing the class and getting rid of these three-part breakdown; all of us have felt hampered by the divisions and dissatisfied with the scope of each course.

Unlike many of the All-University Curriculum courses, "Discovering America" is not team-taught, although we are considering changing that and putting together a team for the new incarnation of the course. At the moment, however, I still am solely responsible for choosing the materials and teaching the course. And every semester--or, rather, in the middle of each semester, when book orders are due for the following term--I find myself re-thinking the course and searching for the perfect combination of texts, that special, magical set of materials that will be so fascinating, so illuminating, so moving that students will be eager to read, will come to class early and stay late, will be bursting with enthusiasm as they consider the issues. I have yet to find such a combination.

But I do think I have greatly improved the choice of readings from the first time I taught the course, and I have to admit I never tire of trying to find that One Perfect Syllabus, the one that will admit me to the Syllabus Hall of Fame.

Before I get to the main topic of this discussion--the use of non-traditional research projects--I'd like to briefly go through the assigned readings for each semester, beginning with Spring 1989, which was the first time I taught the class. I had originally been scheduled to teach "Discovering America" for the first time in the Fall of 1989, but because of some staff changes, I found myself with only about two months to prepare the course. I relied heavily on the syllabus of a colleague, but since I did not have his experience, nor did I share his expertise in a number of areas, I found myself with a mishmash of material that lacked focus. I tried to include far too much, especially in the section on the frontier. American Western literature and culture is my area of specialization, so I naturally wanted to teach everything I knew about it--in three weeks.

Needless to say, it was impossible to do more than skim the surface of any of the issues; the students did not get a clear sense of what manifest destiny was or what impact it had on America. I also failed to demonstrate to the students that different types of texts serve different functions; history is not like fiction, and such material needs to be considered within the context of its discipline. Students read Alan Trachtenberg's "The Westward Route," an except from a book published in 1982, in the same way and with the same intentions that they read a short story, "On Texas Street" by Ernest Haycox. I discovered that I needed to help them distinguish between the approach a historian takes and the way in which a writer of fiction uses history to create an account of the way an event might have occurred in the past. Because I did not include a discussion of these methodologies, students did not learn that content is not the only reason one has for reading; the form in which the material appears, and the reasons an author has for choosing that form, are also important.

As I mentioned, I revise the course every semester. The general topics we study remain the same: the West, gender, industrialism, immigration, racism, and the Twenties. But I have shifted away from secondary material to using primary texts--diaries, journals, testimonials, contemporary essays and fiction--all of which contain a strong authorial voice--because that is what I want the students to hear: the voices in history.

I want them to learn about America's past from those who lived it; I hope the students will learn that these are real people, with dreams, values, fears, with all the strengths and weaknesses any of us have. I want members of the class to identify with these people and feel as if they have met them. I want the documents to seem as if they are alive and vital and relevant to us today, in 1991, not just the useless thoughts of people long dead and gone.

For a number of reasons, I do include some secondary texts. I now assign a short biography of Andrew Carnegie that acts as a springboard for our exploration of industrialism, though I also pass out essays by Henry George, Henry Lloyd, and Samuel Gompers for background on labor issues. I do usually lecture (as briefly as I can) on each unit we study, to give some necessary historical information so the readings will be in context I show slides during the unit on the West as we discuss the conception of the West as artists portrayed it, to contrast with the journals of pioneers and explorers. A number of videos from The American Experience are also useful, including those on the transcontinental railroad, immigration, and the 1920s.

After teaching the class for two years, I have finally arrived at a good balance of materials, although I am still looking for the perfect set. Basically I learned that quality is more important than quantity; students resist reading and balk at reading anything "long" (the definition of which varies widely, of course). The longest article is about ten pages and I assign each book in chunks of about thirty pages per class, or about sixty pages a week. They may be asked to read longer sections of fiction, such as The Jungle, but generally I get few complaints about the amount of reading. And for the most part, students respond positively to the selections. Naturally no one likes everything, but the reading is varied enough so that everyone seems to find something she or he can respond to.

Besides refining the selection of texts, I have also grappled with what kinds of assignments to give. I have experimented with various combinations of shorter and longer papers, journals, quizzes, group projects, essay exams--all of the usual types of assignments. I change them as I feel myself becoming bored with a certain format, or if the material I have assigned seems to require a particular type of work.

The most problematic assignment has been the research project. Sometimes I do not assign one, but have more frequent shorter pieces of writing. I always miss having that final, pull-it-together term project, though. But the traditional research paper was not working very well, either; after all, many courses require term papers, but the AUC courses are supposed to be different. I want our students to have the opportunity to do non-traditional types of projects and to use their imaginations. I wanted the students to have the opportunity in "Discovering America" to do a project that would parallel the kinds of texts they were being exposed to.

An excellent book by a librarian inspired me to try a new and different approach to the term project. Marilyn Lutzker's Research Projects for College Students has a chapter on non-traditional projects. Among the projects she suggests are Personal Writings: letters, diaries, journals; newspapers: articles, editorials, news conferences; Compilations: anthologies, scrapbooks, sourcebooks; Leaflets and Pamphlets.

Here are the suggestions I make to my students for projects:

1. Become a person between 1840 and 1930 (more or less) in America. Over a span of time (you decide the time frame) keep a diary or journal in which you tell about your life. The possibilities are endless: pioneer, Native American, saloon keeper, town marshal, doctor, lawyer journalist, artist, factory worker, labor leader, immigrant, tailor, shopkeeper, actor, farmer, poet, railroad worker, social worker, mother and housewife...the choice is yours.

2. Write one issue of a newspaper from any given day. (Possible group project.)

3. Write a series of newspaper or magazine articles about a single issue over a period of time.

4. Write a series of editorials about one issue.

5. Become a newspaper editor and write a number of editorials over the years about key issues.

6. Do a series of radio broadcasts, or, make up a regular radio program and "broadcast" every day or week. (You must hand in tapes as well as the written transcripts.)

7. Write and tape a series of debates. (Possible group project.)

8. Keep a scrapbook as one person might have, e.g., Andrew Carnegie, Margaret Sanger, Booker T. Washington.

9. Keep a scrapbook about someone or something--if you are a movie fan, for example, you could keep a fan scrapbook.

10. If you are an artist, musician, or actor, you could do paintings, sculptures, write songs, or do a performance. NOTE: you must hand in a written paper as well, though it does not have to be ten pages.

If you choose to write a traditional term paper, please see me so we can discuss your research methods.

I explain to the students that I am trying to get them to take on a persona, to create a voice through which they can express something about a certain era that has an authenticity, a veracity, and that the research they do will enable them to have the necessary information to do this. Then, when they have the information, their imaginations come into play: create a person, re-create a time--if a reader finds herself drawn into the work and believing in the voice of the fictional author, then the project is a success.

I also emphasize that the suggestions are only that--suggestions for them to shape as they will. The requirements are that the topic fall somewhere in the nineteenth or twentieth centuries and that it be connected with American culture. The minimum length is the equivalent of ten typed pages, though of course paintings or other non-written texts have to be judged within the context of their disciplines.

To my surprise and delight, the projects I received surpassed my expectations and convinced me I was on the right track. I'll go into detail about just a few of them, but overall, out of fifty students, I was disappointed in only three or four, and those failed because of laziness, not because they disliked or did not understand the assignment.

Many of the students chose to keep diaries or journals; a few wrote letters. Some made scrapbooks, and a number did paintings (the university has a very good art school). The visual artists, all art majors, each did quite different kind of projects. One of the very best was a young woman who became the painter George Carlin. She kept a journal as Carlin and did four paintings in the Catlin style. The paintings were good, but the diary was excellent--the voice sounded so authentic that it was clear she had done her research well.

Among those who kept diaries, several chose to be pioneer women. Of these, The Journal and Poetry of Elise Moore captivated me for two reasons: I was completely engaged by the Moore family's experiences, and I loved the care the student author, Stacey Sanderson, took to make the journal look authentic. She dipped each page in tea, dried it with a blow dryer, and burned the edges of the pages to give them a crumbling look. Then she wrote on it in longhand. Several of the writers took the time to make their projects look as if they had been found in a trunk somewhere--it was great fun.

And that, too, is key here: having fun. We of course like to say that learning can be fun, but more often than not, the work becomes drudgery, done only to fulfill a requirement. These students truly enjoyed doing these projects, and I hope that means that whatever they may have learned will stay with them for awhile.

Other projects included the Journal of Kit Carson, A Diary of George Gershwin, in which the author, a young woman, has Gershwin tell about composing "the rhapsody" and its triumphant reception, then goes on to detail the increasing headaches and dizzy spells that were symptoms of a brain tumor, and The Journal of Lucy Vitullo O'Brian, a young widow who becomes a madame, opening a place she calls "Lucy's Retreat." Dr. Matthew Bauer III" (actually a young woman named Alison Mattos), a gynecologist, kept a journal from 1880 to 1917, focusing on the issues of contraception, and relating stories of births and deaths. Another art student kept a journal as painter Mary Cassatt, complete with sketches.

I could go on, but the point is obvious: with the help of Lutzker's book, I had come upon a research project that enabled students to use not only the information they get in class, but also to practice the forms of the texts they had studied. In creating these people, they had to stretch themselves in order to make connections with history in ways they never had been asked to do before. The enthusiasm with which most of the students tackled their projects, and the reactions of the students to what their peers had done, convinced me that my experiment was a success.

Student as Teacher: Literature and Film of Other Cultures

It is an enormous task to attempt to sensitize students to appreciating cultural differences. We aim first at introducing them to other ways of seeing and doing with the intention that they will come to be more tolerant of others' values. We also come to ask them to identify a system of ideals greater than the conventions of any localized culture. This often means not treating another set of values as marginal, alien or other. Or worse yet, wrong or stupid. It also means reexamination of their own cultural values which may not necessarily mean abandoning what they hold (though it sometimes does mean that) but rather articulating a wider morality which can contain conflicting value systems in a climate of respect and cooperation.

Literature and film are cultural expressions with which students are fairly comfortable. So we select poems, stories, plays and essays and a film from each of five cultures to study in a term. This year we have worked with China, Turkey, USSR, Argentina and Brazil.

We focus on 9 major topics and try to organize the course toward some consideration of those. They are: children, generations, gender roles, patriotism, the land, social stratification, work, education and ritual.

In the process of teaching the course over the past four years it has become clear to me that the more the students are responsible for their own learning, the more they invest in it. This is especially appropriate in a course where the material is sensitive and where it would be all too easy for the professor to stand up and lecture them about how we all ought to appreciate and love one another. So we have devised methods of turning part of the teaching over to the students. Here are two ways in which we've done that this term.

The first is to actually have students present a piece of literature to their peers in the small discussion section meeting. A student assigned the task must do at least three things: he or she must explicate the work (though not summarize the plot), declare his or her own view of the major cultural issues in the work, and pose three questions for the class discussion that will ensue. Two students are assigned to write official evaluative responses to the presentation. Those responses are keyed to specific evaluative criteria and the student responders change with each presentation. The system works in such fashion that every student gets to respond to two of the presentations over the course of the term. A copy of the evaluative response is given to the presenter and a copy is given to the instructor, who also uses the same response form.

The second project is built around the issue of tone. Students often have difficulty understanding whether something in a film or a literary work is meant to be taken seriously or not. Clearly humor is one of the hardest things to understand across cultures. So we have students find an informant from another culture who will tell them a joke which his/her culture would find amusing. The student then delivers the joke to the class and we discuss the basis of the humor, and our response to it. In the process we notice that students see how deeply a culture's value system is indicated in its humor. They also learn a good deal about their own values.

"A Western Heritage: The Humanities" considers the contemporary search for solutions to the age-old problem of establishing a common understanding of truth, art and ethics. The course is designed to allow students to explore those broad areas of human creativity - literature, philosophy, history, law, music and the arts - known as the humanities, together with their essential components, conventions and connections. In all of the readings, writing, discussion and activities students grapple with the perplexing questions of value and meaning that have plagued humankind through the ages.

This paper focuses on two of the central works in the course that successfully move the course from a traditional and somewhat exclusive view of the humanities to a more inclusive vision of western heritage. The two books, Zen and the Art of Motorcycle Maintenance: An Inquiry into Values by Robert Pirsig and The Painted Bird by Jerzy Kosinski provide rich opportunities for exploration of values and expansion of the meanings of 'western' and 'heritage.'

The course begins with Pirsig's autobiographical work, a piece posing contemporary American problems and perspectives. The narrative is one in which the search for "Quality" is set out in a series of chautauquas, reflections or dialogues. While on this physical, mental and spiritual journey, the narrator posits that a central problem of contemporary Western culture is the separation of society into romantic and classic modes of perception, the former associated with "feelings" and art, the latter with reason, analysis, science and technology. The narrator attempts to dissolve these dualities, both metaphysical and workaday, that he sees as the roots of civilization's problems: subject and object, mind and machine, thought and action, romantic and classical thinking (DiSanto, Steele 1990). His "solution" is a return to pre-Socratic, action-oriented, doing, with care - as in motorcycle maintenance, with side-long glances at Far Eastern modes of perception and action in Zen (Brayfield 1987).

The solution proposed in this work inevitably leads to a discussion of an ethic of care and the role of human values in the search for knowledge. We can then turn to works of Gilligan (1982) for a discussion of the ethic of care in the context of rights versus responsibility. Excerpts from Women's Ways of Knowing (Belenky et al, 1986), especially the chapter on connected teaching, encourages examination of the concrete, everyday experiences in our educational settings. Analysis of student disengagement in the learning process, the relationship between alienation and issues of race, gender and class, readily emerge from the readings. In all discussions, the reference point or touchstone is Zen and the Art of Motorcycle Maintenance.

Students begin to observe the dualities and the sense of isolation that accompany persons or cultures when ideas are cut off from action, heart separated from mind, science, art or religion posited as value-free. They better understand Richard Rodriguez's statement that he felt divorced from his body in Hunger of Memory, the concept of "Double-Face" in The Joy Luck Club.

Conversely, they find a richer, 'connected' Socrates in his willingness to die for his ideas, understand better Martin Luther King's reference to Socrates in his "Letter From a Birmingham Jail," and feel the sense of care and responsibility in Antigone's actions. Of course, they continue to question why those leaders who act with care, attempt to do the right thing, are such threats to society that ultimately they must die. Zen and the Art of Motorcycle Maintenance expands students' understanding of the complexities, the gains and losses, the dichotomies that have accompanied the development of western heritage. It provides a lens through which they can better frame contemporary problems while re-focusing on the past.

The Painted Bird, Jerzy Kosinski's brutal novel about a young boy separated from his parents during World War II, casts another light - shadow might be a better term - on western heritage. There is no book I have ever used, in any course, on any level, which captivates students more than this savage work. Students are at one repulsed by and attracted to the tale of the young boy abandoned by his parents, wandering from village to village in Eastern Europe. Students are forced to look at humanity in its most inhumane trappings - the trappings of war. They search for good, justice, an ethic of care in a world where survival and self-protection are constant concerns. They begin to grasp the levels and layers of the image of Lekh's painted bird, killed by its own because its appearance is different. The young boy, abused because he is dark-haired and dark-eyed, represents all painted birds, outcasts from cultures, societies or social institutions because they look or sound different.

The image of the "Other" is powerfully planted in the students' minds - one student, in fact, portrayed in as a 'laser image right in the middle of my forehead." Regarding the peasants in The Painted Bird, Kosinski says they symbolize and personify the level to which the so-called European Civilization was forced by World War II. They became part of the persecution and lawlessness which the war had been preparing them for. They understood this terror, because it occurred within the elementary categories of brutality, committed by the strong against the weak, the victors over the vanquished (Kosinski 1965). The Painted Bird provides unusual glimpses of brutality and kindness; the boy is beaten unmercifully, yet individual peasants and German soldiers risk their lives by not killing him.

In past years, I have ended the semester with The Painted Bird However, as the student population changes and as I begin to revise my own ideas on the 'what' and 'how' of western heritage, I find that this book provides a provocative opening to an examination of power and powerlessness, 'primitive' versus civilized terror, and the image and role of the Other. Students begin to see other 'painted birds' on the subways, under the bridges, in shopping malls, in the student union and in the classroom.

Sometimes they see the image in the mirror. They understand that the boy's experiences make him _feel_ like Lekh's painted bird. There are countless works that can be used in conjunction with _The Painted Bird_. Ellison's _Invisible Man_; Camus' _The Stranger_; Morrison's _The Bluest Eye;_, Walker's _The Color Purple;_, Kingston's _The Woman Warrior;_, Barnes' _Nightwood_; and countless other novels and short stories illustrate the painted birds' perspectives on the meaning and value of western heritage.

Zen and the Art of Motorcycle Maintenance, often criticized for being a 'masculine' book inaccessible to women, and _The Painted Bird_, often criticized for its sexual violence and sensationalism, both provide extraordinary opportunities for expansion and inclusion of diverse ideas, values and meaning in any course on western heritage.

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A SURVEY OF INTERDISCIPLINARY AND NONTRADITIONAL COMPUTER SCIENCE AND INFORMATION SYSTEMS PROGRAMS AT THE AMERICAN UNIVERSITY

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Introduction

The American University has long incorporated nontraditional and interdisciplinary programs in the Computer Science and Information Systems (CSIS) fields to meet the changing demands of undergraduate and graduate student populations. This paper will survey current programs and future projects under development in these areas.

These CSIS projects involve joint curriculum development and teaching efforts across disciplines at American University. This paper will examine cooperative efforts between CSIS and Physics, Performing Arts, Education, and Sociology.

In addition, this paper will examine an innovative repackaging of the current Information Systems M.S. degree that is designed to capture a larger share of the professional market.

Finally, this paper will describe some innovative instructional approaches which involve students with real-world approaches to computer systems.

The Interdisciplinary Approach

There appears to be a growing call at universities today for research and curriculum integration. It is becoming increasingly unacceptable for university departments and even individual faculty members to narrowly define and confine their specialties and research interests.

There is a strongly perceived need for departments and individuals to take a multidisciplinary approach, to go beyond discipline boundaries and integrate knowledge across the curriculum.

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A recent survey of university professors noted by Ernest L. Boyer in Scholarship Reconsidered (Princeton University Press, 1990) revealed their opinion of the multidisciplinary approach to higher education. In response to the statement, "Multidisciplinary work is soft and should not be considered scholarship," only 8 percent agreed, 17 percent were neutral, and 75 percent disagreed. This pattern of opinion, according to the research, was true with only slight variation for professors in all disciplines and across all types of institutions.

On many university campuses this attitude is manifestly evident as traditional departmental and organizational boundaries are being bridged by new, joint programs that combine the knowledge and approaches of two or more disciplines into new packages reflecting collaboration, integration, and multi-layered learning.

Joint programs between the Computer Science and Information Systems Department and other departments at American University reflect a growing recognition of and commitment to interdisciplinary programs.

Education and Technology

CSIS and the School of Education have recently started work on establishing both undergraduate and graduate degree programs that integrate computer technology with education. The first course, Foundations of Educational Computing, will be offered in the summer of 1991 and is designed to attract a variety of different students and professionals.

This course provides a comprehensive introduction to the concepts, theory, and practice of using computers in an educational environment to enhance teaching and manage course work. Focus is on using the computer as a tool that demands active student involvement and emphasizes the teaching of thinking and problem-solving skills. No prior computer or programming knowledge is required.

The primary focus of this course is on how the computer as a tool can best expand the capabilities of the teacher in the classroom. Through hands-on sessions on IBM, Apple II and Macintosh computers, students will learn programs and applications that can be used in classroom and administrative settings.

This course is appropriate for several student audiences: students in the Computer Science and Information Systems Department who are interested in teaching; students in the Education Department who are interested in an introductory course in computers that focuses specifically on education; students in any other departments who are interested in using the computer as a teaching tool; and, current teachers in local schools who can use this course as part of their inservice training.

There appears to be considerable interest both within and outside of American University for a course of this nature and for additional related courses based upon the concepts of this introductory course. There are several reasons for this interest.

First, most of the current literature in the field of educational computing acknowledges that the training of teachers in this area has lagged far behind the actual acquisition of hardware and software in the schools. This has resulted in a large percentage of new teachers entering school systems knowing less about the computers in their classroom than many of their students. In addition, many of the teachers who are using the computers in the classroom may be using them ineffectively if they are simply using them as alternative delivery devices (i.e., only for drill and practice tutorials). Teachers need to be trained, even at this introductory level, on the uses of computers that demand active student involvement and that emphasize thinking and problem-solving. This course addresses the question, "How can the computer as a tool best expand the capabilities of the teacher?

Second, there are currently few (if any) courses in the Computer Science and Information Systems Department that address the computing needs of non-CSIS majors who wish to take a computer course as either a tool of research requirement or as a computer elective. This course provides that option for Education (and other departments) undergraduate and graduate students.

Third, this course can also be used as an inservice training course for current teachers in the area. Interest in this particular course as well as additional planned courses has been expressed already by area school districts.

Fourth, the joint development efforts of the CSIS department and the Education department in the creation of this course can be the beginning of a interdisciplinary effort that can be valuable for both departments as they attempt to meet the needs of their respective student constituencies.

This course is planned to be the first in a series of courses that will comprise a specialization option in either (or both) the CSIS and Education departments that deals with computers in education. This will be an interdisciplinary program with some courses residing in the CSIS curriculum and some courses residing in the Education curriculum.

Music and Technology

Beginning in the Fall of 1991, the CSIS department will cooperate with the Department of Physics and the Department of Performing Arts to offer a new B.A. degree in Music and Technology. Each student will be required to take 39 credit hours from the core curriculum plus 12 credit hours of required options to be chosen from Computer Science, Music and/or Audio Technology.

The B.A. in Music and Technology is a multidisciplinary program focusing on the new technology of sound synthesizers and computers, with practical applications in concerts and recordings. With this program, students will develop skills needed in mastering the new technology which is bringing about innovations in music and is creating a unique collaboration between technology and art.

This program will complement the existing Audio Technology (AT) program offered by the Physics Department. Currently two types of students enroll in AT: those interested in recording techniques and those interested in electronic-synthesized music. This program will certainly enrich the synthesized music offering and make it a more complete program.

The Music and Technology program will lead to a BA degree and is aimed at attracting students with a broad interest in music, audio technology, and computer science. In this program, emphasis is placed on the creative/ artistic aspects of musical technology that recognizes the growing collaboration that is occurring between scientist and musician, technology and art. This program aims at educating a new type of musician who will have to be an interdisciplinary thinker with knowledge of computers and synthesizers and with a broadened musical vision. In turn, computer science and physics students in this program will be better prepared to deal with the artistic and technological complexities of the next century. The program has characteristics that will provide training for an anticipated new type of scientist.

This program emphasizes creativity and draws on learning skills from both the arts and the sciences. Music majors can expand their expressive horizons through technology and science. Computer science and audio technology students can find a creative outlet for their technical skills. This innovative program should be helpful in recruiting prospective students to the College of Arts & Science and The American University.

Other Interdisciplinary/Nontraditional Programs

Sociology and Technology

Discussions were recently started between CSIS and the Sociology Department to develop an interdisciplinary program between these two fields of study that will enable students to specialize in studying the social dimensions of computing. This program could focus on areas such as examining the social consequences of different kinds of computerization on social life in organizations and in the larger society and examining the social dimensions of the work and organizational worlds in which computer technologies are developed, marketed, disseminated, deployed, and sustained.

Information Systems Intensive Program

CSIS in collaboration with The Center for Professional Development at American University has recently developed an innovative format for the Information Systems master's degree program. The program will include the current Master of Science in Information Systems (MSIS) curriculum delivered in an intensive format.

This intensive format includes: an accelerated part-time schedule to complete the degree in 24 months of weekend classes; experientially-based classes developed to complement a homogeneous group; the use of electronic communications for supplemental learning; and, opportunities for networking and growth through class-by-class relationships with colleagues in the group.

The program will be geared to professionals from public, private and not-for-profit sectors. Individuals with at least two years of experience who are responsible for applying or managing information technologies within their organizations, or those wishing to compete for positions in information resource management, programming management, computer facilities management, would be best suited for this program.

One innovative aspect of this program is the planned use of distance education methods for some of the instruction. Each student will be required to own or have easy access to a microcomputer, a modem, and a FAX machine. Because the classes in this program are scheduled to meet only on Friday afternoon and all day Saturday every three weeks throughout the year, distance education techniques enable the instructor and student to communicate regarding homework assignments, examination reviews, project progress, and other activities necessary to a continuous learning environment. This approach is innovative for American University as no other programs either on or off campus are operated this way.

Research Experiences for Undergraduates

With a grant from the National Science Foundation, the CSIS department is currently preparing for its third summer Research Experiences for Undergraduates program. A group of currently-enrolled college sophomores and juniors will be selected form a pool of applicants to work in teams with CSIS faculty during the summer in the area of intelligent systems. Teams will experiment with software development tools, design and implement software, and develop intelligent system applications.

Students who are selected for this program will receive a stipend of $2,000 plus free room and board on the AU campus. In addition, there will be opportunities to publish papers with faculty about the research carried on in this project. This is an innovative program in an emerging technology that is focused solely on undergraduates.

CSIS Curriculum Integration for Student Projects

Like many traditional departments, CSIS has organized their courses in a modular, building block fashion. Students normally progress from one course to the next learning a different aspect of systems development that builds upon knowledge learned in previous courses. Each course tends to be self-contained and non-interactive with the other courses in the curriculum.

This approach, while effective in conveying specific information to students, does not accurately reflect the real-world environment of systems analysis, design and development that they will soon enter. Most, if not all, systems development environments, are characterized by continual interaction between different project teams and many iterations of the different phases of development.

To provide students with the flavor of this real-world environment, several instructors and their classes informally teamed together this past semester to work on joint, inter-class projects. The instructors of the undergraduate and graduate-level database classes assigned their classes to work on actual University database projects (a student advising system and a transfer of credit system) using team-oriented design techniques. The instructor of the systems documentation class divided his class into three teams. Two of the teams were assigned to the two database projects to document the activities of the design project teams. The other documentation team was assigned to work with another instructor who had written a modified version of BASIC to produce a user manual and/or tutorial for the new language.

Students still received assignments and heard lectures from their respective instructors but they were responsible for organizing their teams and time to cooperate on joint activities that spanned self-contained class material and classroom boundaries. A significant portion of their grades was associated with their success in managing and integrating their activities. This approach required the continuing commitment and semester-long cooperation between four instructors to provide students with relevant projects in a realistic work environment. For the four instructors, this approach required more work, less structured classes, more flexibility in grading assignments, and a high degree of continued trust and cooperation. It is a break from the traditional method of teaching these classes in the current curriculum.

Encouraging Interdisciplinary Innovation

Interdisciplinary programs emphasize the concepts of change and innovation. Academic programs and departments have too often been characterized by a narrowly focused view of their particular charter. This charter has formerly been defined as providing core course education in a particular discipline with a few electives that usually provide students with only limited opportunities to expand their knowledge outside of that particular discipline. Interdisciplinary and nontraditional program, in contrast, provide both student and faculty with greater opportunity for an integrated, more comprehensive learning experience.

Some of the key components of moving to this interdisciplinary approach are:

Cooperation between organizational units

Individual academic departments can focus on encouraging university administration to engage in "win-win" arrangements whereby bureaucratic red-tape can be reduced or eliminated for initiatives proposing greater interaction between departmental programs.

These types of arrangements can result in departments quickly developing and offering courses that can be taken as research tools by students in other programs. For example, CSIS is interested in developing a series of courses called Computer Tools for the Social Sciences, Computer Tools for Education, Computer Tools for Law, Computer Tools for Communication. These courses can first be offered as special topics and then incorporated into the curriculum as warranted. This provides students in other programs with useful computer knowledge that is specific to their fields. In addition, some of these courses could serve as anchors for outreach programs directed to area high school teachers.

Emphasis on expanding curriculum offerings

To increase the attractiveness of the individual programs to prospective students, departments should monitor the external environment, carefully evaluate trends and create additional course offerings that meet the present and future needs of the market. For example, in CSIS a specialty option emphasizing Human-Computer Interaction could be created in the MS curriculum. This option would enable students to intensively study topics such as user-interface design, ergonomics, and robotics. Another specialty option could be in Technical Communication. Here students would concentrate on electronic publishing, hypertext/hypermedia, computer-aided instruction, etc. Both these and other options would be grounded in the traditional core curriculum.

Pursuit of nontraditional recruiting

By creating additional and relevant course offerings, departments can make themselves potentially more attractive to a wider variety of people. Some of these potential audiences are area high-school teachers who may first become interested through receiving Continuing Education Units for attending a special topics course or through participation in a grant program established to instruct teachers in classroom computer use. For example,other audiences that CSIS may be interested in attracting are members of local chapters of organizations such as the Human Factors Society and the Society for Technical Communication. Few of the members of these organizations have advanced degrees -- primarily because traditional programs have not addressed their needs.

Conclusion

In many ways the Computer Science and Information Systems Department at The American University had been previously characterized by traditional standards of curriculum development, course development, course instruction, and student recruiting. All of these activities began to change, however, when a philosophy of interdisciplinary and nontraditional scholarship started to take hold among the faculty and was supported by the college and university administration. CSIS has started down the road to integrative curriculum and instruction and has met with success and satisfaction that will serve as an impetus to continued yinnovative program development.

FORM FOLLOWS FUNCTION: INTERDISCIPLINARY EDUCATION AT CAZENOVIA COLLEGE

Timothy McLaughlin
Jo Buffalo

Introduction

Louis Sullivan's dictum "form follows function" expresses his concern that a building's form express its functions. Cazenovia College's Applied Arts and Sciences Program is an educational "form" striving to express "functions" performed by graduates. In this paper we discuss this educational adaptation of Sullivan's dictum. In the design and implementation of a new upper-division interdisciplinarity program, Cazenovia College has sought to create an educational experience that consciously tries to match form with function. In our design process we identified what we believe to be the functions our graduates will be called upon to fulfill in their subsequent careers. In our curriculum development, we sought to create the forms that will foster the necessary abilities to succeed in these functions. Amongst the most significant of these functions is one that no one involved in adult education will be surprised to hear us mention: the role of life-long learner.

Setting our Objectives

We claim no great virtue for striving to adapt Sullivan's dictum to an educational institution. The characteristics of our institution and the nature of educational needs in our Central New York region dictated this policy as we undertook the addition of upper division programs to our previous Associate degree offerings. Cazenovia College is a small private college founded in 1824 in a small village southeast of Syracuse, New York. In the fall of 1983, the College made the shift from a women's college to a coeducational status that dramatically improved our enrollment base. The Board of Trustees decided in May 1985 to seek a further transformation of the College by requesting permission from the New York State Board of Regents to award baccalaureate degrees.

Faculty members and administrators involved in baccalaureate planning took into consideration the nature of our student population throughout the development of the new program. Our student population was and is essentially career-oriented in their aspirations, sharply focused on

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learning the concrete skills that would provide them with a good job upon completion of an Associate Degree, and extremely passive in their learning style. These students often demonstrate little appreciation of the liberal arts and display an almost willful ignorance of the potential value of the competencies associated with this area of education. Early in our discussions, it became clear that we as a faculty believed students needed an upper division education that stressed what we have identified as essential liberal arts competencies: social interaction skills, the ability to communicate effectively in a wide variety of modes and settings, problem-solving capabilities, and an understanding of their own values plus some appreciation for the values underlying others' behaviors. Without the enhancement of these abilities, graduates equipped only with technical career skills faced the dangers of technological obsolescence and greatly diminished opportunities for professional advancement.

Further research within the Central New York business community confirmed that our academic concerns matched the needs of regional employers. In the "Desirable Characteristics for Employees" survey conducted in January 1986, Cazenovia College requested small and medium-sized employers in our region to identify what they considered to be the most desirable characteristics in a newly hired, entry-level employee. In their responses, employers placed great emphasis on a capacity for moral judgement, valuing, social interaction skills, and critical thinking abilities in general. The more specific and concrete skills such as computer programming abilities and knowledge of the corporate environment received consistently lower ratings. These results were further confirmed in consultation with an Advisory Board of local employers who commented on the general design of our program as it emerged, the individual courses we proposed to offer, and the nature of our instructional methods.

The Programmatic Form

The Applied Arts and Sciences Program that emerged from this planning process is based on the concept of the inverted pyramid; two years of career-oriented instruction in an Associate Program followed by two years of increasingly more abstract and theoretical work based on liberal arts competencies of problem-solving, social interaction, communications, and valuing. Courses are organized around competencies and interdisciplinarity subject areas. Competencies are integrated in each course as well as having specific courses devoted to them in the core curriculum. This degree is designated a Bachelor's of Science in Applied Arts and Sciences because we mix professional growth with these four competencies. This educational blending is done through a careful mixing of three types of courses. The General Core (GE) courses focus specifically on the liberal arts competencies. Professional development continues in the Professional Core

(PR) while the Specializations are more specialized sequences of courses in Using the Arts (UA), Social Institutions (SI), and Science and Technology (ST). Students select the specialization that meets their career and educational needs.

Students proceed within the General Core curriculum from the application of concrete skills to independent and self-motivated study. As students progress, each is encouraged to develop and increase a capacity for independent critical thinking that utilizes these learning abilities within their chosen field of study. The first communications course emphasizes command of forms and techniques such as interviewing and presentation skills. The subsequent course builds onto this concrete base an understanding of the theoretical concepts that underlie the methods assimilated in the first course. Later courses throughout the curriculum draw upon the communications skills mastered by students in these two courses. The sequence culminates in a professional conference conducted by the graduating seniors wherein they report the results of their Senior Projects to faculty, the college community, and the general public. The valuing courses follow a similar path moving from an examination of personal values in life and career in the first course through American societal and corporate ethics towards a final course that compares the ethical perspectives of American and selected non-Western cultures. As students move through these General Core courses, their growing command of the competencies is also evaluated throughout the other areas of the curriculum.

The Professional Core curriculum further develops students' professional skills assimilated in their first two years of study. This is accomplished by blending classroom work with more individualized learning experiences. Professional and general core courses in the Fall and Winter terms of the Junior year are intended to maximize the benefits of the required Spring term Field Experience. All Juniors are placed in a business, governmental agency, or other appropriate setting to work under both professional and faculty mentor supervision. At the end of the Field Experience, students negotiate with the Program Director to determine what Professional Special Topics courses will be offered during the Senior year. These courses focus on subjects that directly relate to the student's chosen professional area. One of the Special Topics courses offered to our first Senior class analyzed the procedures necessary to start a small or medium sized business in New York State. Each student in this course also had the opportunity to work individually with the instructor on planning their own business. The instructor herself had substantial professional experience in advising clients on the setup of new businesses. Other students with more specialized needs work directly with a community professional or a member of the College faculty in the appropriate career area. An Independent Study project during the Senior year offers students a final opportunity to demonstrate their practical integration of professional knowledge, Field Experience, and liberal arts competencies.

Specializations are interdisciplinary subject areas that correspond to the students' career interests. The Specialization supplements the student's increased professional knowledge and enhanced liberal arts competencies with arts and sciences courses that increases their academic knowledge base. Students select the Specialization that best contributes to their career preparation. The Social Institutions courses provide students interested in business, administrative or human services careers with academic knowledge applicable to economic and social issues in American and selected foreign cultures. The emphasis throughout the sequence is on the recognition of economic and social problems, mastering the models and means that allow change to occur in these areas, and a capstone course on the planning and implementation of necessary changes. Courses in the Science and Technology specialization focus on the interpretation and communication of scientific and technical information. The purpose is not to produce scientists but individuals capable of working as administrative or communications intermediaries within a scientific or technologically oriented corporation or governmental agency. Students in the Using the Arts specialization, often artists themselves, are immersed in a range of art disciplines (i.e. graphic art, music, drama, literature, and dance) to gain an understanding of the artistic process across these disciplines. Their study prepares them to function in arts-oriented businesses and public institutions.

The programmatic form balances life-long learning skills and continued development of professional abilities. The three curricular elements, the General and Professional cores and the chosen Specialization, reenforce one another in preparing students for the functions -both social and economic - that they must fulfill in society throughout their lives.

Teaching/Learning Forms

A radical transformation of teaching/learning forms both within and without the classroom had to occur in order to prepare our students for their societal functions in the way envisaged during the development of the Applied Arts and Sciences Program. The skills identified in the "Desirable Characteristics for Employees" (1986) offered an interesting contrast to the assumption that career skills are highly specialized, job specific, technical skills. The top ranking characteristics in the survey create a very different portrait of an ideal employee. The top score was "positive attitude about the job", second was "oral communications skills", followed by, in order, "ability to be a good team member", problem solving ability", "ability to work independently", "written communication skills", interpersonal skills", decision making ability", "creativity" and "capacity for moral judgement". These characteristics far outranked job specific skills such as "computer literacy", "data processing", and "computer programming". What does this mean for the forms of teaching/learning? It means that attending large lecture classes and taking multiple choice exams does very little to prepare a student to function in a desirable way as a member of a work team.

We have attempted to structure educational settings that will prepare our students to move easily from college to work by ensuring that they have had considerable practice functioning in the ways identified by the survey. Our primary educational setting is the seminar which provides students with a very interactive classroom situation. The size of the seminar is kept small enough to allow everyone to participate in discussions, role playing, simulations and other small group activities. Obviously, it is very clear when a student is not participating - they have no one to hide behind. Students tend to do more preparation for these classes.

Team teaching is a teaching/learning technique we adopted in response to the Program's need for interdisciplinary. Instructors bring different points of view to the same subject material from their different disciplines. One of our more successful versions of team teaching uses one "primary" teacher and one "guest" teacher who takes over the class once a week. The students' motivation increases dramatically when the "primary" teacher attended the classes run by the "guest" teacher in the role of student. This form provides the student with one clear authority in the classroom and lessens the chances for a class meeting to descend into "dueling faculty". Other variations on the team teaching theme are alternating responsibility by days/presentations or discussions in which both teachers participate as equal participants. In these cooperative efforts it is imperative that the two instructors communicate frequently and support each others' classroom efforts. An advantage of this variation is that the two teachers can learn from each other and be prepared to teach the course on their own if necessary.

Using guest lecturers has also helped expand the diversity of our instruction in a small college setting. At the end of last year's spring term, we brought in a number of speakers including business executives, communications specialists, entrepreneurs, and, as a keynote speaker, Professor David Porush from Rennselaer Polytechnic Institute. Dr. Porush delivered an excellent talk on interdisciplinarity in science and technology while simultaneously helping to validate our new program. Sometimes the outside expert will be much more effective in getting the message across than the familiar faculty students see on a daily basis.

All students must have a full-time "field experience" in the last term of their junior year. This can be an internship in a business or governmental agency, a "shadowing" experience with a professional, or a career-oriented research project. These experiences outside academic walls are most valuable in showing the students how classroom knowledge relates to the functions they will fulfill after graduation. They serve also as a base for further coursework since students are expected to identify and report to the Program Director the needs they identify during the field experience for further career specific study. Field experiences also open new avenues of inquiry that may lead towards the student's eventual Senior Project topic.

Functioning Within the Forms: Three Examples

Following the experiences of three seniors who selected the Using the Arts (UA) specialization of the Applied Arts and Sciences Program will illustrate this discussion much more fully.

Paul entered the Program after completing an A.A.S. degree in Advertising Design. He was not committed by graphic arts having many interests which were stimulated by his college experiences. He began his UA coursework by taking Introduction to the Creative Process through Drama and Music. The general study of the creative process was enhanced by attending selected performances offered on campus by arrangement with the Syracuse Cultural Resources Council. In this term Paul witnessed "The Maskman", a solo act with masks, "June Bug Jabbo Jones", a solo black performer who assumes the character of storyteller during performances, and a woodwind quintet who played both jazz and classical music. Before each performance a teaching artist came to class and conducted workshops directly related to the process which took place in order to create the pieces in the performances. One actor led a workshop on the mask in its historical and cultural contexts, another actor focused on oral traditions and storytelling in a second workshop. Workshops on musical themes included one on harmonics and another on syncopation. In each case principles were explained as the students did simple exercises that involved those principles. The emphasis in all of these experiences was on the process not the product. One of Paul's creative projects for the class was a beautiful piece of poetry about leaving Poland that made his fellow students cry when he read it to them. Following this course, Paul had an internship with a commercial photographer who specializes in product shots for advertising agencies. In his senior year, Paul continued his writing in Special Topics in the Creative Process by creating a novella with an environmental theme for young readers. In the Winter term, his Senior Project continued the environmental theme with a research project on acid rain. In the Spring, he is committed to the creation of illustrations for his novella and will go through the steps necessary to get the work published.

Our second student, George, entered the Program with an A.A.S. degree in Commercial Illustration. His final projects in an introductory Creative Process class were an autobiographical short story and an abstract self portrait. In independent study under faculty supervision, he learned the necessary computer graphics software to create a new style for a contemporary American car with suitable illustrations. His Junior field experience was in the local high school as an assistant to the art teacher, followed by a part-time field experience in the Fall of his senior year with an advertising firm. The work he created for Special Topics in the Creative Process included a painted diptych for the waiting room in an automotive service department. George's Senior Project is a paper on historical trends and influences in automotive styling which he is both writing and illustrating.

Beth Noll came to our Program with an A.A.S. degree in Studio Art. In the introductory Creative Process class, she produced a video using simple animation familiar to viewers of Saturday Night Live's "Mr. Bill". Her field experience, supervised by a Cazenovia College faculty member, was a feasibility study on the possibilities of upgrading the College Radio Station. The document was professional enough in quality to be cited in our accreditation self-study. Beth's research interests led in her Senior Project to a feasibility study on opening her own recording company. In this project, she was assisted by Ian, a student with technical expertise in this field. The paper reviews the structure of the recording industry, examines strategies for entering the market, and encompasses business design, physical plant needs, recording equipment specifications, logo and letterhead artwork, and a master budget for startup costs.

In all of these examples, students in the Using the Arts Specialization produced increasingly more complex artistic projects while developing a greater comprehension and command of functions artists fulfill in American society. The educational philosophy incorporated in the Using the Arts courses is consistent with the old Chinese proverb: "To hear is to forget, to see is to remember, To do is to know". These experiences are firmly set within the Programmatic form that ensures continued growth in the liberal arts competencies.

Conclusion

We assume that students come into our program best suited to address concrete issues. Our "form" fosters the students' growth from this narrow focus towards comprehension of the abstractions beyond. This progression is an expression of our commitment to the student's more effective functioning as an adult member of our society. This approach shifts more responsibility to students as they progress through the program. We guide, cajole, prod and even on occasion coerce students to pursue knowledge but they assume more control of their educational experiences than in traditional programs. By the time graduation rolls around, each student is accustomed to determining what issues he or she considers worthy of investigation, what means will be used to conduct the investigation, and how the results can best be communicated to others.

Preliminary student evaluations of the Program indicate that students believe our objectives both legitimate and attainable. In May, 1990, Juniors in the Applied Arts and Sciences Program participated in a campus-wide Student Programs Outcomes Survey. Even though this survey was carried out halfway through their participation in the Program, student responses were very positive:

87% agreed that there was appropriate diversity of instructional methods
68% indicated increased interdisciplinary awareness
74% indicated increased awareness of global issues
78% reported increased awareness of other cultures
81% reported an increased ability to formulate and solve problems

Further assessment of the Applied Arts and Sciences Program will be obtained through further surveys of students, graduates, and employers in the years to come. These results along with continued consultation with regional employers and our own sense of societal and economic change will be used to ensure that our educational forms continue to follow the functions needed after graduation.

THE INTERDISCIPLINARY ROLE BETWEEN LAW AND NATURAL SCIENCE

Martin L. Saradjian

As we approach closer to the twenty-first century, it becomes more evident that many of the environmental problems will be unresolved. The ever-growing problems in acid rain, depletion of ozone layers in our atmosphere, water pollution, toxic waste seepage, soil erosion, decimation of our tropical rain forest, endangerment of rare plant and animal species are but a few of the numerous environmental issues affecting not only the local communities but have taken on global significance.[1] Behind the ecological problem has been the conflict between the profit-development forces vis-a-vis the preservation-protectionism forces of the environment. Our goal as educators is not only to prepare our business and liberal arts graduates for entry into a diverse array of employment and professional opportunities but also to afford an opportunity in their educational process to develop an understanding between the vital balance of economic development and environmental protection.

It is presently our human activities that are altering the earth's chemistry in ways that may cause serious environmental and economic harm within our lifetimes or those of our children. Perhaps this cause for concern has been the reason why over 100 colleges and universities in the New England area are offering courses and programs in the field of environmental education.[2]

Background

To address this environmental concern locally, Dr. Gerald R. Ferrera[3] and I created in 1974 a law course entitled, Environmental Law (LA102) designed with the purpose of having students exposed to legal environmental issues in our society. The one semester three credit course was open to all students in the liberal arts and business programs at Bentley College, Waltham, Massachusetts.

In 1984, I was delegated the task of updating the course and to add a new interdisciplinary dimension. Namely a synthesis of knowledge between law and natural science was incorporated into the course in cooperation with Dr. Robert W. Wallace who chaired the Natural Science Department at that time. The statutory and case materials were fused with natural science technology in order to understand the pollution problems that were and still are altering the earth's chemistry. To that end, five environmental laboratory sessions were incorporated into this undergraduate environmental law course to fully appreciate the interdisciplinary role of laws and scientific data in assessing the environmental problems more accurately.

Martin L. Saradjian, Associate Professor of Law, Bentley College

Laboratory Testing

Prior to conducting the lab tests, students by way of lecture and classroom discussions were cognizant of the regulatory provisions of the environmental law and were to apply their investigative skills, methods and equipment in detecting pollutants in air emissions, contaminants in drinking water, lead poisoning in objects and toxic substances in cigarette smoke exposure.

Air Emissions Test #1

With a safety requirement of one instructor per eleven students ratio, the first test began in the chemistry lab to ascertain if air pollutants were being emitted from auto exhaust into the atmosphere. Each student was supplied with the necessary material and proceeded to test their own vehicle for the presence of nitrogen dioxide, hydrocarbon and carbon monoxide poisoning. Although the federal statutes include more than these three pollutants, testing for time and safety reasons limited the testing. Readings on the level of pollutants emitted from students' auto exhaust system were quantified by usage of the gas chromatograph and spectrophotometer.[4] By participating in the foregoing test, students gained some insight for the required inspection sticker used as a means to regulate harmful emissions in the Commonwealth of Massachusetts in compliance with provisions of the Federal Clean Air Act.[5] Although the federal statute was recently amended the guidelines set forth in the 1972 laws are used as the EPA standard guidelines.

Drinking Water Test #2

According to lab instructions[6], each student brought in a sanitized jar containing drinking water obtained from a private well or public water supply. Our objective was to detect contaminants such as phosphate, chloride, sodium from roadsalting, pH acid factor and bacteria coliform from leakage of septic tanks or sewage into the water supply. The EPA standards and guidelines set forth in the Safe Drinking Water Act of 1974 as amended in 1977,[7] were applied to determine what maximum allowable levels of certain chemicals and bacteriological pollutants were present in the drinking water specimen.

Lead Poisoning Test #3

Since the days of the Greek and Roman Empires, lead poisoning has posed a serious health problem and still poses a serious health and environmental concern throughout the United States. Lead poisoning has been detected in our city main and home water pipelines as well as in drinking vessels made of pewter, glass or ceramics, paint, toys, lining of water coolers and toothpaste tubs, solder used on cans and pipe joints[8] and in additives such as tetraethyl used as an additive in leaded regular gasoline fuels have all collectively heightened the problem.[9]

As a result of serious known neurological damage, the Commonwealth of Massachusetts and other states enacted the Lead Poisoning Prevention and Control Act[10] to monitor and the prevent lead poisoning. To date, the Lead Poisoning Control Center estimates that each year in Massachusetts 1500 children under the age of six has been identified as lead poisoned. As recently as November 24, 1986, the EPA has reported that 1 out of 5 Americans were drinking tap water containing excessive levels of highly toxic lead levels.[11]

Again using the procedures of EPA and state environmental agencies, the students monitored and tested ceramic mugs, glasses and pewter drinking vessels for possible discovery of harmful levels of lead through a leaching process with acetic acid.

While conducting an environmental chemistry class, Dr. Robert Wallace discovered a glass recently used as a giveaway promotional by Mobil gas stations contained as much as 900 parts per million of lead which far exceeded the EPA standards of 2 parts per million of permissible lead. As a result of his finding, unsuspecting state health officials at the Lead Poisoning Prevention and Control Center conducted similar tests and found the exact same level of lead content in the glasses. The glasses were removed from all Mobil gas stations in the Commonwealth.[12]

Toxic Substances Test #4

In this experiment, filtered cigarettes were tested for possible toxic substances. Students discovered by their testing procedures that the filtered cigarettes contained nicotine, formaldehyde, arsenic, hydrogen cyanide, hydrogen sulfide, tar and even carbon monoxide all of which substances are suspected to have harmful effects on the human body.[13]

Students were also able to understand the rationale for banning second-hand smoke, that is smoke from someone else's cigarette, cigar or pipe in a poorly vented space and its increased risk on developing lung cancer, emphysema and heart disease even though the victim was a non-smoker.[14] Because of the serious health hazard posed by this type of indoor pollution emitted by passive smoke, members of the class, staff and faculty assisted in obtaining the successful passage of the Clean Indoor Pollution Act.[15]

Noise Pollution Test #5

Noise pollution which I sometimes refer to as the "forgotten pollution" was the final test performed but in the classroom setting. Students using a calibrated sound meter brought in their "boom boxes" stereos, headsets and other objects emitting loud sounds to discover if the danger zone of 70 decibels in sound level was attained.

By conducting this test, students began to appreciate the reasoning for the common law action in the form of a tort of nuisance which was brought for emitting unreasonable amount of noise. Subsequently the Congress recognizing the widespread problem, enacted the Noise Control Act of 1972[16] with its purpose of reducing or eliminating noise that jeopardizes the health and welfare of society. The regulatory powers at the outset concentrated on known noise emissions from industrial machinery, appliances, trains, trucks and airplanes.[17] The EPA was given the power to set standards for noise abatement.[18] In fact, violators were subjected to fines and imprisonment.[19] Citizens were given the right to sue violators including government agencies to force compliance and enforcement of the Noise Control Act.[20] The statute even mandated the federal government to buy quiet motors, engines, transportation and electrical equipment designed with noise abatement features.[21]

Students inquired in this portion of the testing as to why in our modern high technological environment does the problem of abnormal noise levels still exist? The inevitable answer given has been lack of enforcement. The Reagan Administration as a cost-saving measure cut the staff in the EPA noise program from 110 to 3 staff members.[22] The U.S. Occupational Safety and Health Administration (OSHA) was given the task of enforcement in an industrial setting. In fiscal year 1987, only 2,558 violations were cited for violation of the noise abatement laws and fines amounted to $49,168.00 dollars.[23] Troubled by the low priority in enforcement, many communities such as the City of Waltham, Massachusetts, enacted their own community anti-noise ordinance to safeguard hearing protection.[24]

Statutory Materials

Where in most colleges, students are merely introduced to a chapter devoted to environmental regulations of business as in a Legal Environmental of Business course[25], the Environmental Law course[26] devotes an entire semester to understanding the conflict between environmental protection and economic development. Ironically the word ecology as well as the word economics both have a Greek derivation meaning home.[27] Students attempt to comprehend the concept of the world being our home with the vital balance needed for globalization of economic markets. They are encouraged to search for investigative data and to understand risk assessment as set forth in federal and state statutory and regulatory guidelines.

Students learn to view the complexity of the objectives stated in the first piece of legislation established to set forth our national policy for the environment under the National Environmental Policy Act[28]:

> "TO DECLARE A NATIONAL POLICY WHICH WILL ENCOURAGE PRODUCTIVE AND ENJOYABLE HARMONY BETWEEN MAN AND HIS ENVIRONMENT; TO PROMOTE EFFORTS WHICH WILL PREVENT OR ELIMINATE DAMAGE TO THE ENVIRONMENT AND BIOSPHERE AND STIMULATE THE HEALTH AND WELFARE OF MAN: TO ENRICH THE UNDERSTANDING OF ECOLOGICAL SYSTEMS AND NATURAL RESOURCES IMPORTANT TO THE NATION: AND TO ESTABLISH A COUNCIL ON ENVIRONMENTAL QUALITY."

The fusion of theory with reality in protection of the environment was manifested in enacted laws such as the Clean Air Act[29] the Federal Clean Water Act,[30] the Safe Drinking Water Act[31], the Noise Control Act[32], the Ocean Dumping Act[33], the Nuclear Waste Disposal Act[34], the Solid Waste Disposal Act[35], the Comprehensive Environmental Response, Compensation and Liability Act[36] commonly known as the Superfund Act. Federal Insecticide, Fungicide and Rodenticide Act[37], the Toxic Substance Control Act (TSA)[38], Resource Conservation & Recovery Act[39], the Surface Mining Control and Reclamation Act[40] the Uranium Mill Tailings Radiation Control Act[41], Endangered Species Act[42], Coastal Zone Management Act[43] and other related federal statutory enactments.

Case Materials

Cases analysis is crucial to the students' understanding of the conflicting economic forces vis-a-vis the environmentalist protectionism and the need for a vital balance between them. Cases accompanying each of the statutory material are incorporated into the course to dramatize the cogent issues of air, water and soil pollution.

One case which has been used in the course has been the Anderson et al v. Cryovac et al.[44] case commonly called the Woburn case or the Toxic Trial case. The case illustrates the vital need for technical risk assessment and research in attempting to establish liability for harm incurred. Cryovac is a Woburn, Massachusetts based division of W.R. Grace and Co., an international conglomerate headquartered in New York.

The complaint alleged that two industrial companies, Cryovac and Beatrice Food Co., polluted public well waters causing interference with the quiet enjoyment of their property and causing them to suffer direct adverse physical effect, an increased risk of illness and disease, the death of six children and seven children suffering from leukemia due to high levels of trichlorethylene (TCE) a toxic chemical. Also toxic chemicals of arsenic and chromium were found in the area of the water supply. During the course of the trial, a jury absolved Beatrice Food Co. from liability of the six leukemia deaths and illnesses. The same jury found W.R. Grace liable for toxic waste dumping.

Rather than schedule a retrial as ordered by Judge Walter Jay Skinner of the U.S. Federal District Court, W.R. Grace agreed to settlement of an undisclosed amount of money based on adverse research findings. The study by Dr. Marvin Zelen of the Harvard School of Public Health's Department of Biostatistics played a crucial role in establishing that a higher statistical risk existed for those receiving contaminated water from wells G and H in the Town of Woburn and that a positive association existed between the availability of water from wells G & H and the incidence of childhood leukemia, prenatal deaths and some classes of birth defects and childhood disorders.[45]

The study further identified over 192 cases of respiratory illnesses, 33 cases of urinary or kidney disorders and 21 instances of allergies or skin disorders in households using water from the two contaminated wells.[46] Also the study reported a total of 20 cases of leukemia, birth defects and fetal or newborn deaths occurring in households with high levels of contaminated water from the two wells.[47] The researchers basically found that the more bad water residents drank, the higher the likelihood of suffering serious health consequences.[48]

This type of analysis clearly shows the difficulty in establishing causal linkage with harm incurred without technical assessment of data which emphasizes high risk assessments and high probabilities short of finding proximate cause.

Conclusion

This course because of its unique interdisciplinary approach has attracted students who were already employed as biologists and geologists for the Army Corps of Engineers. Others were chemists working for water testing companies, others were members of their town conservation commissions. The majority of students enrolled in the course because of their interest and concern for protecting the environment. Those students who desired to continue this course of study could do so with the Environmental Studies Program with 36 credit hours taken beyond their core requirements. The Environmental Law course is used as an elective in that program. Environmental education from kindergarten to graduate and law school is vital to understanding and resolving environmental pollution caused by human activities on a worldwide basis.

Endnotes

1. Worldwatch Paper 71; Altering the Earth's Chemistry, Sandra Postel Worldwatch Institute (1986).

2. A Guide to Environmental Programs in New England Colleges & Universities, prepared by The New England Environmental Network, Tufts University, 1987.

3. Co-author, The Legal Environment of Business, Wm. C. Brown (1986) & Chairperson of the Law Department, Bentley College.

4. Wallace, R., Laboratory Experiments With Consumer Products, Bentley College Press, 1980.

5. 42 U.S.C. § 7401 et seq. as amended (1970).

6. See note 4, supra.

7. 42 U.S.C. § 1421 et seq. as amended (1974).

8. Miller, G. Tyler, Living in the Environment (3rd ed. Wadsworth, (1982).

9. Id.

10. Mass. Gen. L. ch 111 § 190 et seq. & 105 CMR 460.000.

11. Wellborn, Pouring Lead from the Tap, U.S. News & World Report, November 24, 1986 at 71.

12. N.Y. Times (Sunday), February 7, 1988, at 39, col. 1.

13. See Note 4, supra.

14. Surgeon General's Report; Health Consequences of Smoking, 1985.

15. Mass. Gen. L. ch. 111 § 72v as amended by 72w, effective April 13, 1988.

16. 42 U.S.C. § 4901 et seq. (1972) as amended by the Quiet Communities Act 42 U.S.C. § 1431.

17. 42 U.S.C. § 4904.

18. 42 U.S.C. § 4905.

19. 42 U.S.C. § 4910.

20. 42 U.S.C. § 4911.

21. 42 U.S.C. § 4918.

22. Office of Management and Budget (OMB) DIRECTIVE, January 28, 1983.

23. Occupational, Health & Safety, February, 1988 at 57.

24. Waltham, Mass. Ordinance 25932, ch. 10 § 10-6 (June 24, 1986).

25. LA200, Required course for those business majors with a sophomore standing, Bentley College Bulletin, 1987-1988.

26. LA102, a social selective course. supra.

27. Greek derivation "Oikos" home, Standard College Dictionary (1957).

28. 42 U.S.C. § 4321 (1969).

29. See Note 5, supra.

30. 33 U.S.C. 1251 et seq. as amended (1977).

31. See Note 7, supra.

32. See Note 16, supra.

33. 33 U.S.C. § 1401 et seq. as amended (also known as) the Marine Protection, Research and Sanctuaries Act of 1972.

34. 42 U.S.C. § 9601 et seq. as amended (1982).

35. 42 U.S.C. § 3259 et seq. as amended (1965) and amended by enactment of Resource Recovery Act 42 U.S.C. 6901 et seq. (1970).

36. 42 U.S.C. § 9601 et seq. as amended (1980).

37. Repealed the 1947 Insecticide Act replacing it with (FIFRA) Federal Insecticide, Fungicide and Rodenticide Act 7 U.S.C. § 135 et seq. as amended (1972).

38. 15 U.S.C. § 2601 et seq. as amended (1976).

39. 42 U.S.C. § 6901 et seq. as amended (1976).

40. 42 U.S.C. § 6907 et seq. as amended (1977).

41. 42 U.S.C. § 7901 et seq. as amended (1978).

42. 16 U.S.C. § 1536 et seq. as amended (1973).

43. 16 U.S.C. § 1451-64 et seq. as amended (1972).

44. D-Mass. 1983 civ.-82-1672-S. See 6 F.R.S.3rd 369 & 96 FRD431 also see 805 Fed.2d 1, November 5, 1986.

45. Woburn Health Study; An Analysis of Reproductive and Childhood Disorders and its Relationship to Environmental Hazards, Harvard University (February 7, 1984).

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INTEGRATING THE ARTS AND SCIENCES:
AN EXPERIMENT IN INTERDISCIPLINARY EPISTEMOLOGY

F. LeRon Shults

Introduction

A new hope for the integration of the Arts and Sciences has emerged in recent decades with the convergence of new approaches to knowing in the natural and human sciences. A unitary approach to human inquiry has been on the rise since the revolutionary changes effected by Albert Einstein in physics. It is now being recognized that the human and social sciences inquire into the open systems of the four-dimensional space-time universe, and that their research methods must be determined by this fact. A truly inter-disciplinary dialogue must be based on an attempt to overcome the cultural split which has resulted from the radical distinction between the so-called "hard" and "soft" sciences, between the extremes of positivist empiricism and existentialist subjectivism. This split can be healed only by recognizing the proper roles of reason and belief in all human knowing. The purpose of this presentation is to contribute to the dialogue by exploring three of Einstein's sayings about "God" and by searching for isomorphic indicators which impact all modes of inquiry across the curriculum. These three sayings are:

> **God Does Not Play Dice.** The belief in the objective intelligibility of the universe, and in an ordered regularity of all events independent of the observer.
>
> **God Does Not Wear His Heart On His Sleeve.** The belief that the deep structures of reality cannot be deduced from appearances, but only by penetrating into their inherent systemic relations.
>
> **God Is Sophisticated But Not Malicious.** The belief in the reliability of the universe, despite its complexity and subtlety, without which rational thought and behavior would be impossible.

This essay is subtitled "an experiment in interdisciplinary epistemology." It is an attempt to begin constructing a bridge for dialogue between the disciplines by clarifying the deep structures of human inquiry which are isomorphic in all knowledge. Bower provided a useful image when he argued that learning theory is "experimental epistemology." [1] Researchers in the Arts

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and in the Sciences conduct their inquiries in the same objective reality of the universe. Each discipline is unique in terms of the object of its study; the method of inquiry must be determined by that object. However, a unitary approach to knowledge recognizes the underlying similarities in all heuristic activity.

Nontraditional education, particularly in its integration of thought and action in adult learning, may provide a matrix within which this experiment in interdisciplinary epistemology may be continually refined. Einstein once said that science is the extension and refinement of everyday thinking. [2] The same may be said of nontraditional adult learning. The adult learner is embedded in the complex systems of reflection and practice in the "everyday" world and takes the time for "education" in order to extend and refine her thinking and activity.

In the exposition of each of Einstein's logion about God the following method will be observed. First, the immediate reason for the statement made in response to a development or problem in physics will be described. Second, an attempt will be made to show how the same approach to reality, *mutatis mutandis*, applies to other disciplines. Finally, the role which nontraditional adult learning may play in this enterprise will be explored. In conclusion, after examining each of Einstein's sayings, three isomorphisms will be identified and proposed as a basis for further interdisciplinary experimentation.

A brief word is in order regarding what Einstein meant by the term "God." His was not a conception of the personal God of the Judeo-Christian tradition, but of the Leibnizian notion of "God or Nature" (*deus sive natura*). He did believe that the source of the aspiration toward truth and understanding, the kind of "faith" which was a prerequisite for science, comes from the sphere of religion. "Science without religion is lame, religion without science is blind." [3] This is a prime example of Einstein's desire to integrate the Arts and Sciences through a unitary approach to human inquiry.

I. God Does Not Play Dice

This is the most popular of Einstein's statements about "God," and a great deal has been written concerning exactly what he meant. Some physicists have taken it to imply Einstein's inability to accept the implications of quantum theory. John Gribbin, for example, argues that Einstein found it

> more comfortable to believe that the equations of quantum mechanics simply represent some sort of mathematical trick... For what quantum mechanics says is that nothing is real and that we cannot say anything about what things are doing when we are not looking at them.[4]

T.F. Torrance, on the other hand, asserts that "God does not play dice" was Einstein's way of stating his firm belief in a real world of law and order which objectively exists. Einstein antagonized the Copenhagen and Gottingen forms of quantum theory because he believed they did not even attempt to penetrate into the inner structure of the "quanta" or to explain them in terms of the field structures within which they are embedded. He was committed to belief in the "objective intelligibility of the universe, which would have nothing to do with the Kantian idea that we can know only what we make and shape as objects or our understanding." [5]

The new science of "Chaos" may prove fruitful to this discussion in the future by demonstrating that even if it appears that God does play dice, the apparent chaos is an ordered randomness. [6] In the last two decades traditional conceptions of order have been challenged by the scientific discovery that "chaos" permeates the behavior of natural systems in the cosmos. Many of its proponents claim that Chaos theory is the third great scientific revolution of the twentieth century. The first was Einstein's theory of relativity which dissolved the Newtonian dogma of absolute space and time. The second was "quantum theory" which spoiled the dream of a completely controllable measurement process. Now the new science of Chaos has eradicated Laplace's illusion of deterministic predictability. While relativity describes the macroscopic and quantum theory the microscopic view of nature, the theory of Chaos also applies to the study of objects at the everyday scale of human experience. The science of Chaos examines the universal nature of systems and the common elements of behavior within them.

This is a result of a general move in scientific inquiry away from reductionism (looking at systems in terms of their constituent parts) and toward looking at the behavior of systems as a whole. Because it has attracted thinkers from diverse fields and been used to refer to a wide variety of phenomena, this kind of approach lends itself to interdisciplinary dialogue. In economics and sociology, for example, researchers are recognizing the reality of the movement toward a "global village" and the need for inquiry methods which identify the interrelated systems of human culture.

In the field of adult education, this tendency is illustrated in the model proposed by Boyd and Apps in their attempt to redefine the discipline. [7] Their conceptual model has three dimensions. The first is "transactional mode," of which there are three: individual, small group, community. The second is "client focus:" the client to be served is either an individual, a group or a community. The third dimension of the model is composed of three "systems" (personal, social or cultural), one of which is the primary focus and target for analysis or change. By visualizing a cube, the adult educator may locate a given educational activity in terms of three coordinates. This is an example of the kind of inquiry which recognizes the orderliness and intelligibility of objective reality.

II. God Does Not Wear His Heart on His Sleeve [8]

This statement is less well-known, but it is just as illuminating in reference to Einstein's scientific approach. Torrance explains:

> If "God does not play dice" stands for Einstein's conviction that there is an immanent order everywhere in the universe -- an ordered regularity of all events independent of us -- "God does not wear his heart on his sleeve" stands for the conviction that the real secrets of nature, the reasons for that order, cannot be read off the patterns of the phenomenal surface. That is to say, we cannot deduce from appearances the deep structures of reality. [9]

The relationship between the statements is really integral. The world does not always appear to the scientist in "ordered regularity;" it often appears quite chaotic. Believing in the intrinsic order of the universe even in its microcosmic realms of quantum reality, the scientist must patiently attempt to penetrate deeply into the ontological structure of things. Only in this way can the researcher hope to discover the inner logic which guides reality in its systemic relations at the deepest level of being. "We reach knowledge in such a way that the surface of things is coordinated with deep, invisible structures; we think empirical and theoretical levels of reality conjunctively together in a dimension of ontological depth." [10]

Einstein's work was built in part on the Dynamical Theory of the Electromagnetic Field proposed by James Clerk Maxwell. Overcoming the Newtonian distinction between absolute and apparent space/time, Clerk Maxwell showed that all "bodies" in the universe must be defined and explained in terms of their inherent relations within the field of reality. It was Immanuel Kant who transferred the Newtonian dualism to the human ego and concretized the dichotomy between the phenomenal realm of the senses and the noumenal realm which is beyond direct human knowledge. Philosophers of science are now trying to heal this epistemological split by applying "field-thinking" to the question of human knowledge.

This kind of "field-thinking" can be applied to other disciplines as well. In psychoanalysis, for example, the therapist does not accept the *prima facie* statements of the patient or consider the reported experiences of the patient in isolation. Rather, the therapist attempts to penetrate into the subconscious of the patient and to examine the complex interpersonal relations (the "field") in which he is embedded. Similarly, in sociology it is generally accepted that social groups cannot be analyzed *in abstracto*, but must be described in terms of the multivariate strings of the interconnected webs of the inhabited earth.

Nontraditional approaches to adult learning hold unique promise for contributing to this kind of "field-thinking" in education. One thinks particularly of the work of Brazilian educator Paulo Freire, who has argued so forcefully in his work with illiterate peasants for the integration of reflection and praxis in education. He argues against a "banking" approach in which the teacher "deposits" knowledge in the student. Instead he calls for "problem-posing" education, in which persons

> develop their power to perceive critically the way they exist in the world with which and in which they find themselves; they come to see the world not as a static reality, but as a reality in process, in transformation... hence, the teacher-student and the students-teachers reflect simultaneously on themselves and the world without dichotomizing this reflection from action, and thus establish an authentic form of thought and action.[11]

III. God Is Sophisticated But Not Malicious [12]

This is perhaps the most enigmatic of Einstein's sayings about God. Torrance asserts that this logion expresses Einstein's belief in the reliability of the universe. It represents a deeply held faith in "the immanent order hidden behind the intricate and often baffling interconnections which we find in the universe."[13]

In physics, this scientific belief is correlated to Einstein's dogma of the constancy of light in the universe. Light travels at a constant speed, and all bodies in motion are relative to space and time and must be defined in relation to the constancy of light. This is one of the powerful implications of the special theory of relativity. In spite of the apparent chaos in the multitude of dynamic structures which exist in the field-laws of the universe, the constancy of the speed of light provides a unique metaphysical, or meta-scientific, anchor which the scientist may use to bolster his or her faith that the universe, while sophisticated, is not malicious. Einstein explains:

> Without the belief that it is possible to grasp reality with our theoretical constructions, without the belief in the inner harmony of the world, there could be no science. This belief is and always will remain the fundamental motive for all scientific creation. [14]

The same beliefs and motives are necessary for scientific inquiry in all disciplines, whether or not the researchers in every field are prepared to admit it. In psychological experiments, the researchers believe that a better understanding of the problem or situation will emerge if the methods of inquiry are appropriate and carried out properly. Even that which is psychopathological is believed to be guided by some form of order. Sociology is an attempt to discover the laws which govern societal and cultural development. In spite of the chaos and variety, human groups interact and develop in ways which follow some kind of rational order. Any scientific approach which rejects the quest for understanding that order is ultimately based in nihilism.

In the field of education, the tendency toward nihilism has been trenchantly observed by Allen Bloom in The Closing of the American Mind.[15] He argues that in the name of "cpenness" the young American mind has marched into nothingness, led by the false promise of objectivist science. The goal of American education has become the emptying of the mind of all prejudices, assumptions and beliefs. Bloom calls for a return to the tradition of Socrates, for whom Wisdom was the goal of all inquiry, for whom some things were worth giving one's life. But this is only possible in a world where God is not malicious.

Conclusion

The thesis of this essay is that a unitary approach to knowledge, exemplified in the work of Albert Einstein, may contribute to an interdisciplinary dialogue by identifying the deep structures of human knowing which remain the same across the curriculum. The field of nontraditional adult learning was posited as a laboratory within which continuing experimentation may occur, due to its tendency toward integrating thought and action. It is now possible to set forward three isomorphisms which have emerged in this discussion.

Ontological Isomorphism: Both the Arts and the Sciences recognize the objective reality and ordered regularity of the space/time universe.

Methodological Isomorphism: Researchers in both the Arts and the Sciences attempt to penetrate into the inner logic of the systems within which the object of study is embedded.

Teleological Isomorphism: The mutual goal of the Arts and the Sciences is wisdom, the grasping of the complexity and reliability of the universe in order to make rational thought and behavior possible.

Endnotes

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2. Albert Einstein, *Out of My Later Years* (New York: The Philosophical Library, 1950), 59.

3. Albert Einstein, *Ideas and Opinions* (New York: Bonanza Books, 1954), 46.

4. John Gribbin, *In Search of Schrödinger's Cat: Quantum Physics and Reality* (New York: Bantam Books, 1984), 2.

5. T.F. Torrance, *The Ground and Grammar of Theology* (Charlottesville: University Press of Virginia, 1980), 113

6. For a clear layperson's guide to Chaos theory, see John Gleick, *Chaos: The Making of a New Science*.

7. Robert D. Boyd and Jerold Apps (eds), *Redefining the Discipline of Adult Education* (San Francisco: Jossey-Bass, 1980).

8. Albert Einstein; quoted by T.F. Torrance, *Transformation and Convergence in the Frame of Knowledge* (Grand Rapids, MI: Eerdman's, 1984) 253.

9. Torrance, *Ground and Grammar of Theology*, 119.

10. Ibid., 122.

11. Paulo Freire, *Pedagogy of the Oppressed*, trans. Myra B. Ramos (New York: Continuum, 1985), 71.

12. Albert Einstein; quoted by J. Bernstein, *Einstein* (New York: Fontana Press, 1973), 61.

13. Torrance, *Transformation and Convergence*, 256.

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DESIGNING INTERDISCIPLINARY COURSES

Stanley J. Spector

When planning to implement an interdisciplinary approach to curriculum, faculty need to consider the type of program that will best serve their school. Short of constructing an entirely new curriculum, there are at least these three possibilities for implementing interdisciplinary courses in an already existing curriculum: designing new courses reflecting an interdisciplinary approach, modifying and expanding already existing courses in order to give them an interdisciplinary dimension, and combining two already existing courses. At Modesto Junior College, the Scholar's Project has opted for the third approach. Since the approach that we take in implementing interdisciplinary studies is unusual, I will begin with a consideration of some of the factors which have enabled us to develop our program. Then, I will briefly review the philosophical framework underlying our approach, state the consequences for planning that result from that framework, and describe the procedures that we follow when we design our interdisciplinary courses.

The approach that one takes in implementing interdisciplinary studies depends upon several factors. The first factor is institutional support, both philosophically and financially. To attempt any of these possibilities requires that the institution be committed to interdisciplinary education. Faculty interested in interdisciplinary education can usually expect to meet resistance from other faculty and administrators who are not so inclined. However, this resistance can be overcome if the institution itself has made an educational commitment to interdisciplinary studies. Once the institution has made a commitment to interdisciplinary studies, the amount of resources it has to support such a program will determine which of the above approaches it will take. If the institution cannot allocate additional resources, it may simply implement an interdisciplinary dimension to some of the courses that it already offers. With greater resources, the institution may be able to give faculty support in the planning of new courses or the team-teaching of combined courses.

Besides institutional support, a second factor determining the approach one takes when implementing an interdisciplinary course is whether or not students need to transfer the course from a community college to a four-year school. If students are attending a community college and intend to

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transfer, then it is to their benefit to show courses on their transcripts that they can easily transfer. This usually means, at least in California, that these course satisfy the lower division general education pattern established jointly by the University of California and the California State University systems. Thus, designing a new course at the community college level presents problems of articulation with the transfer pattern. This is not the problem at a four-year school. There, new courses have to be accepted only by that school's curriculum review committee who will decide whether or not the course should receive credit. Thus, faculty at a four-year school have more latitude in creating new interdisciplinary courses focused on a particular theme. Most problems with articulation, however, can be avoided at the community college by modifying already approved courses rather than by designing completely new courses.

When considering the question of articulation, another problem arises concerning courses which are sequentially arranged in the curriculum. Most of these courses are in the sciences, and faculty who teach these courses usually argue that students need to master the material of a first course before proceeding to the second. I am not convinced by this argument. First of all, I think it applies only to students who are either majoring in that area or who are already interested in that subject. Students who take a science course simply to fulfill a requirement are not planning on taking the next level course anyway and therefore do not "need" to master the material in the same way at all.

By modifying the content and giving the course an interdisciplinary flavor both sets of students will benefit. The former students, the ones who are already interested in the material, will be able to "fill in" any of the gaps they encounter in content on their own as they continue taking more classes. They will know how to find the information that they need and how to synthesize it with what they already know. The advantage to them of an interdisciplinary approach is to expand the material by presenting it in a broader context. For the other students, those who are simply fulfilling requirements, it is precisely by presenting the material in a broader context that they may come to appreciate that material and consider studying it in more depth in other classes. Thus, students who ordinarily take only one science course may now take more of them.

Philosophical Presuppositions

Interdisciplinary courses share with other courses a set of related assumptions about learning and education. When we design our courses we should bear these assumptions in mind. The first and most important is that learning is an active function and not a passive one. Students learn by actively engaging their subject matters rather than by sitting passively and merely receiving information. Our emphasis is always on what students do and not on what teachers do.

A second presupposition concerns the relationship between living our lives and knowing information. Knowing information always occurs against the background of how we are living our lives. Just as the time that we spend in class and with course related activities is just a small part of our daily schedules, so too is it with our students. Consequently, our courses must enable students to weave the class material into the overall fabrics of their lives. In addition, it is likely that much of what we do in school gets lost in that overall fabric of their lives the minute the semester ends. Keeping in mind that students' lives have a priority over their school time will encourage us to design classes that students can integrate into their lives and experience.

According to the second presupposition, the living of our lives has a logical priority over what we learn insofar as our lives serve as the background against which learning occurs. Similarly, an integrated and synthesized life has a logical priority over a cognitively fragmented life. Prior to our specializing as academics, prior to our departmentalizing our disciplines, and prior to students learning particular "subjects," we all live in a synthesized "world" against which these academic distinctions can be made. A life is a unitary phenomenon which can be analyzed into parts and studied. It is not, however, an aggregate of those parts. Therefore, a theory of learning which demands the addition of different subjects and knowledges to a whole is conceptually flawed.

A fourth presupposition follows from the third. If human lives are unitary wholes, then no one subject matter or discipline is more fundamental or important than any other. Thus, the fourth assumption refers to the neutrality of subject matters. On this view, there is absolutely "no queen of the sciences." In a particular context and for a particular problem, some subject matters may take on more relative importance than others, but this should not be confused with absolute priority.

The last presupposition is consistent with the picture of education that I have drawn with the first four. The goal of education, according to this picture, is to rekindle the sense of wonder, excitement, and inquiry about our lives, world, and experience. It is not to master a content, nor is it to prepare for a career. These goals are too limited and violate the other presuppositions. If these were the goals, then rekindling that sense of wonder would occur only serendipitously. However, by focusing on this first goal and rekindling our sense of inquiry, we can easily also meet these other two goals.

The central issue here concerns the priority of "process" over "content." As long as we are bound to a "content" approach to education, we violate the prescriptions of presuppositions one through four. It is through focusing on "process" that we enable students to actively learn in ways that are meaningful to their lives and experience. And it is through that "meaning" in their experience, that students will master content and prepare for careers.

Consequences for Planning

In accepting these five presuppositions, we are obliged to follow the following guidelines when planning interdisciplinary courses. Our first consideration has to be the focus that we place on what students will do. With a model of learning based on student activity, our teaching has to shift the emphasis away from what faculty do. Our job now will be to help students actively accomplish their tasks. We thus become part of the student's environment and are not nearly as important to the overall process as we individually think we are.

Our second consideration is that regardless of the subject matter and content of the course, we need to arrange activities and assignments which enable students to integrate and synthesize the material with their lives and experience. Thus, we need to abandon a "textbook" approach to our courses that insists that we "cover" a certain amount of material in isolation from an integrated life. The amount of content is not nearly as important as the depth and the quality.

We also need to design activities and assignments that will help students relate two or more different subject matters to each other. One way to accomplish this is to relate each of the subject matters together to a single theme which has its root in life and experience. For example, many interdisciplinary courses offered at four-year schools do this. Sometimes these courses involve one teacher, and sometimes they involve a battery of teachers; in either case, the emphasis is on approaching a particular problem from as many different perspectives as the time during the semester will allow.

This method will also work at two-year schools, although in a slightly different way. Choosing particular problems or themes around which two already existing courses can be organized is one of the ways for faculty at two-year schools to accomplish this goal, given the problems with articulation.

A fourth consequence for planning, following from our accepting that no one science is "queen" over the rest, is that any discipline's content can be learned through some other discipline's materials. In some cases this is obviously true; for example, it would be possible to learn some history through literature or philosophy, or vice versa. In other examples, though, it appears to be more problematic. We can imagine that someone who teaches biology would find it very difficult to "teach" photosynthesis through some other material. However, I do not think that it is impossible. As soon as the biologist gives up the notion that his/her "content" is fundamentally important, s/he will be able to find ways to discuss that content in different contexts. Perhaps, s/he would be able to discuss it through literature or history.

Dyad Planning Procedures at Modesto Junior College

The Scholar's Project at Modesto Junior College is an interdisciplinary program consisting of team-taught dyads in a seminar setting. Each seminar meets six hours a week, and two instructors are always present. Students register for two classes, yet the dyad experience is more that just taking two classes back to back. The instructors plan these dyads for over a year before they teach them in order to design a six credit interdisciplinary learning experience. Having gone through this procedure a number of times, I am able now to identify distinct stages in this planning process.

The first and most difficult task for the two teachers who are planning an interdisciplinary dyad is to determine which courses to combine. Both teachers have expressed an interest in working together, and both are excited about the prospect of team-teaching. Each teacher has a provisional understanding of how the two disciplines might integrate and suggests possible course combinations. At this point, the teachers work with the Scholar's Project Committee to determine which courses best fit the program offerings in terms of the transfer pattern.

Once the teachers have decided which courses to combine, they need to identify central themes of an interdisciplinary course which respect the integrity of each individual course outline. At first, each teacher describes the basic structure and content of his/her course to the other teacher. Then, each tries to accommodate his/her material to each other's course. This part of the process occurs over the course of months, with the two teachers asking each other probing questions about the courses. Finally, themes emerge which both teachers are comfortable with exploring from the two different discipline perspectives.

Once the two teachers have found a way to integrate their courses without sacrificing the integrity of either subject matter, they have to choose materials and determine assignments. Since the interdisciplinary dyads are essentially seminars, it is crucial that they organize their discussions around primary readings. None of the dyads uses textbooks. Each pair of teachers considers together what the readings will be. At every stage of the planning process, the teachers need to work together. The seminar characteristic of the dyad breaks down when one instructor chooses something for what s/he needs and the other chooses something else for her/his purposes. The texts need to be chosen jointly. This is not to say that an instructor chooses materials out of his/her field of expertise. Each teacher must explain to the other how the texts s/he thinks are important will help the entire class explore the topic of the dyad.

In conjunction with choosing materials to read, the teachers must now also create assignments which will help the students penetrate those materials and synthesize them into an interdisciplinary context. The writing assignments, for example, will typically direct the students to reflect on a single theme or topic by referring to all of the materials that they have studied as well as to their own experience. The teachers also develop non-writing assignments that take students outside of the classroom and into the community and the world of their own experience to use the materials that they have conceptually been dealing with during the seminars.

The final procedure in the planning process is the continuous planning that the two instructors have to do during the semester. Planning does not end when the teachers have chosen materials and have tentatively designed the assignments and compiled a syllabus. The syllabus and the assignments must be provisional only since the teachers teaching this course are themselves involved in the process of trying to make connections between the two subject matters and the separate central themes of the course. The connections that both the students and the teachers make during the semester are often not anticipated in advance by the instructors during their planning. In fact, the instructors are frequently surprised by the sorts of connections that they make as well as by how well the two classes actually do integrate with each other. Continuous planning allows the teachers the flexibility to incorporate these new insights into the context of the course.

In conclusion, it is important to note that it is not only the students who benefit from an interdisciplinary approach to education. The faculty teaching in the Scholar's Project have also found the dyads to be an excellent educational opportunity. Working closely with another teacher, studying another discipline's materials, and encouraging intellectual discovery have helped keep this faculty fresh and enthusiastic.

INTEGRATING ACADEMIC AND INDUSTRIAL CONCEPTS IN THE INTERDISCIPLINARY CLASSROOM

David R. Stevenson

Introduction

Abstract: The development of instructional tools for use in the adult interdisciplinary classroom is dependent upon at least two sources of information: academic, which is usually the perspective of the instructor, and corporate, used here as an encompassing term to denote the perspective of adult students who are employed mostly in a non-academic/corporate world. Recently there has been some interest in integrating academic and corporate operational concepts, especially in the application of industrial practices which may have some bearing on the way we run our universities. A particular classroom tool which integrates academic and industrial perspectives is critical systems thinking (CST), a perspective which allows the student to integrate traditional academic tools, such as systems thinking, with broadly practiced industrial tools, such as *kaizen*, a Japanese management concept. As a classroom tool CST has proved to be very useful, but the implications of the integration of concepts upon which CST is based go beyond direct classroom use. In the broad sense this integration of conceptual tools will have an impact upon instructional delivery, the way in which we define the roles of instructor and student, and the means by which we define program success.

Sources of Information

Integrating concepts from academic and industrial sources may involve more than strictly discussing manufacturing techniques in the classroom. Concepts based on academic or industrial sources may seem, on the surface, to lack compatibility, except in classes in which industrial theory is designated as an integral part of the course. But by searching the deeper roots of the concepts we may find that there is a compatibility of approach which allows their integration.

One technique which is based upon a root search of academic and industrial sources of information is critical systems thinking, a methodology used in some interdisciplinary classes (5).

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The Sources of Critical Systems Thinking

Critical systems thinking (CST) is a model of human behavior in a sociotechnical system, originally designed to implement the ideas of Stephen D. Brookfield (1). The book stimulated much discussion in the classroom, but the students, and the instructor, felt that there should be provided more detail concerning how to achieve the levels of awareness described in Brookfield's book. In other words, there was a perceived need for a delineation of the *process* of becoming a critical thinker. Another source of impetus for pursuing a more detailed approach came from the realization of the impact of Japanese management techniques in the automotive work place, where many of the students were employed. Originally, these two were the sources of information for the development of CST: Brookfield's essentially academic approach to critical thinking awareness and the industrial pressures of employing Japanese management techniques. CST, explained in more detail elsewhere (5), depends on several ideas, each of which is important in understanding its implementation. The first is that, in the context of the model, the word *critical* reflects its use in the sense of human interdependence, that the behavior of any one individual in a sociotechnical system is critical, that is, integrally important, to total system performance. Relative to total system performance, an individual is considered either critical or decisively critical. Each person, by virtue of continued behavior in the system, is considered critical, but is then considered decisively critical when the decision made by that individual will have a large impact on system integrity. The distinction between critical and decisively critical is analogous to the members of a sports team; when playing, each team member is critical, with possession of the ball the member is decisively critical.

The corollary to the first idea is that there are no non-critical humans in a sociotechnical system, and that each individual maintains system integrity. The aspect of considering the criticality of each employee in a sociotechnical system lends itself to a comparison with Japanese management techniques: the assembly team in the automotive industry is generally divided into two divisions, team members and team leader, with team members being rotated through the position of team leader. Another analogy is with the amount of attention Japanese managers give employees in assembly plants; each employee is considered critical to total system performance, and training, education and support of, and suggestions from, employees are given top priority. Though not practiced perfectly, these management techniques are being adopted by some American assembly plants, and their acceptance by American management is often through either the pressure of competition or by the direction of Japanese managers in transplanted assembly plants, such as the Mazda assembly plant in Flat Rock, Michigan.

Though the industrial source of CST essentially follows the precepts of some Japanese management techniques, the primary purpose of CST is not to explain industrial management, but to provide a model for understanding, in the classroom, the process of system change.

Process in System Change

Studying and discussing system change is one way of bridging the gap between academic and industrial concepts because it focuses on a general concept, i.e., systems thinking, which lends itself to applications in both the academic and industrial worlds. One way of representing system change is to use a generic flow chart that shows the relationship between system states and environment states, and designates changes in both the system and environment over time. Figure 3 represents this configuration in representing system change over five units of time.

The method serves several purposes. One is to promote the active inclusion of both system and environment when describing system change. Another is to induce the incorporation of change over time.

In class, the topics selected by students for representation are varied. Students have chosen system change in a particular automotive company, in learning how to use computers at work, and in describing change and growth in personal life and work. Generally useful in upper division courses which emphasize technology and change, specifically in the work place, the flow chart method has proven very useful and successful in classes. The reasons for its usefulness and applicability in integrating academic and industrial concepts deserve serious scrutiny, since looking closely at the sources of information which led to the design of the method may illuminate the reasons for its continued use.

Interdisciplinarity and Kaizen

Masaaki Imai writes in his book *Kaizen, the key to Japan's competitive success* (3) that the central focus of Japanese management is "improvement." We can trace the origin of the improvement concept, at least in part, to the American statistician W. Edwards Deming, who, during the MacArthur occupation period, helped instruct the Japanese manufacturers in statistical process control, continuous improvement and quality concepts (2). Central to American manufacturing during World War II, these concepts and techniques were introduced to Japan and were then subsequently relegated to secondary status in manufacturing plants in the United States until the advent of strong Japanese competition in the 1970's.

Imai points out that American manufacturing is essentially result-oriented, while that of Japan is process-oriented. He compares the two using several examples:

> KAIZEN generates process-oriented thinking, since processes must be improved before we get improved results. Further, KAIZEN is people-oriented and is directed at people's efforts. This contrasts sharply with the result-oriented thinking of most Western managers....When the (Japanese) sales manager evaluates a salesperson's performance, that evaluation must include such process-oriented criteria as the amount of the salesperson's time spent calling new customers, time spent on outside customer calls versus time devoted to clerical work at the office, and the percentage of new inquiries successfully closed....By paying attention to these indices, the sales manager hopes to encourage the salesperson to produce improved results sooner or later. In other words, the process is considered just as important as the obviously intended result-sales!...In the United States, generally speaking, no matter how hard a person works, lack of results will result in a poor personal rating and lower income or status. The individual's contribution is valued only for its concrete results. Only the results count in a result-oriented society (3:16-17).

In comparing process-oriented evaluation criteria with result-oriented evaluation criteria, we find that the efforts for improvement in the employee are studied in a step-by-step fashion, shown in Figure 1 as a progression from step A to step D. Process orientation still leads to results, but the emphasis on the details of producing results is what differentiates it. In education this same process orientation can be found in Julie Klein's definition of interdisciplinarity. She states:

> The question of the interdisciplinary individual leads inevitably to the question of interdisciplinarity itself. Interdisciplinarity is neither a subject matter nor a body of content. It is a process for achieving an integrative synthesis, a process that usually begins with a problem, question, topic, or issue. Individuals must work to overcome problems created by differences in disciplinary language and world view. Although there is no absolute linear progression, there are a number of different steps in the process...(4:188).

Following the process orientations of kaizen and interdisciplinarity, CST is demonstrated by the generic flow chart method, the basic configuration of which is shown in Figure 2. The student begins with the characteristics of a system in State I, then shows the influence of the environment, then proceeds to show System State II as a function of the influence of the environment. This continuing pattern of system-environment interaction can be sequenced over any period of time, as is shown in Figure 3. There are at least three questions the student must ask to complete the flow chart. The first is whether a clear delineation between system and environment has been shown. The second is whether a clear example of system change has been demonstrated. The third is whether the information variables, i.e., the elements of change outlined in the rectangles, show a continuity of description. For example, one student proposes to show system change in American Women, from State I without the vote, to State II with the vote. In this case American Government is considered the environment, because, though American Women have access to the Government, American Women alone (if regarded, for demonstration purposes, as a system) do not control American Government. The power to vote is sanctioned by the Government, thus State II includes American Women with the power to vote. To find the information variable which equates the system elements (women, votes) with the environment element (vote) we find that *decision-making power* is common to all three rectangles. In effect, the tool of showing the interaction between system and environment induces the student to *think through system change as a process*, and to search out the common denominator between system change and environment change.

When the student begins to practice the study of system change by using the flow chart method, some of the conceptualizations in interdisciplinarity, as shown in Figure 4, and in the disciplines, become illuminated.

Discussion

Part of the irony of integrating academic concepts, such as interdisciplinarity, and industrial concepts, such as kaizen, is that an example of the integration of the two, such as CST, does not have to be used as an explicator of either interdisciplinarity or industrial techniques *in their formal senses*. When one employs a tool like CST, the more recent sources of information for its design, namely, interdisciplinarity and kaizen, are found to power the CST tool from their *common roots* of employing a process orientation. In effect, it is the roots of the two approaches, not necessarily the approaches themselves, that produce the strength of analysis and synthesis that allows students to use CST to its fullest extent.

Implications

As concepts such as kaizen spread through industry, so will similar concepts spread through academe. The perspective that kaizen is a *general* approach to behavior is shared by Imai. He states that kaizen may be used in many different sectors of society:

> Lastly, while I have confined myself in this book to the impact of KAIZEN strategy on the business community, I believe that KAIZEN strategy is widely applicable in such nonbusiness sectors as government services, schools, and other institutions....These institutions may lack the profit motive, but the KAIZEN concept remains a valid criterion for checking progress (3:229).

The new administrators and faculty of the future are the students of today, and what they study, in many respects, will be what they employ. This may mean that universities may employ concepts such as kaizen at the operational level, thinking from a process orientation about the way we evaluate performance in instructional delivery, in our definition of the roles of instructor and student, and in the ways and means in which we define program success. The reason that these may change is because of the difference between process and result orientations. If we surmise that universities essentially operate from a result orientation, such as emphasizing faculty publications at the expense of quality instruction, the incorporation of a kaizen-like approach will not necessarily decrease the emphasis on research and publication, but will increase the emphasis on quality instruction. What may result is a *balance* between research and instruction as the focus for faculty evaluation, and a *balance* in curriculum between disciplines for students in the liberal arts, sciences and professions. Many universities are already moving in this direction, and the incorporation of a kaizen-like approach will strengthen these initial efforts.

As for now, it is important to realize that what we may integrate in the classroom may be linked at a deeper level, and that a search for roots on that deeper level may reveal lessons that we, as present-day instructors, may ourselves learn.

Acknowledgements

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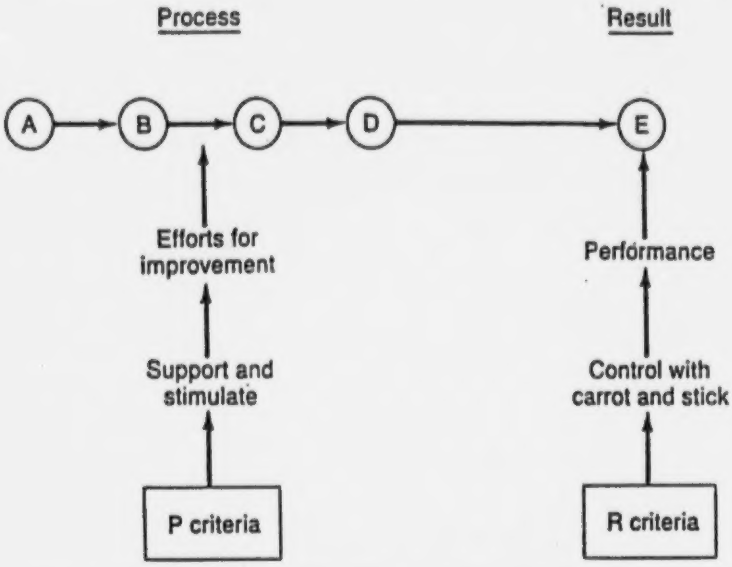
Process
Result
A
B
C
D
E
Efforts for improvement
Support and stimulate
P criteria
Performance
Control with carrot and stick
R criteria

Figure 1. A Comparison of Process-Oriented (P) Criteria and Result-Oriented (R) Criteria (Imai 1986:18)

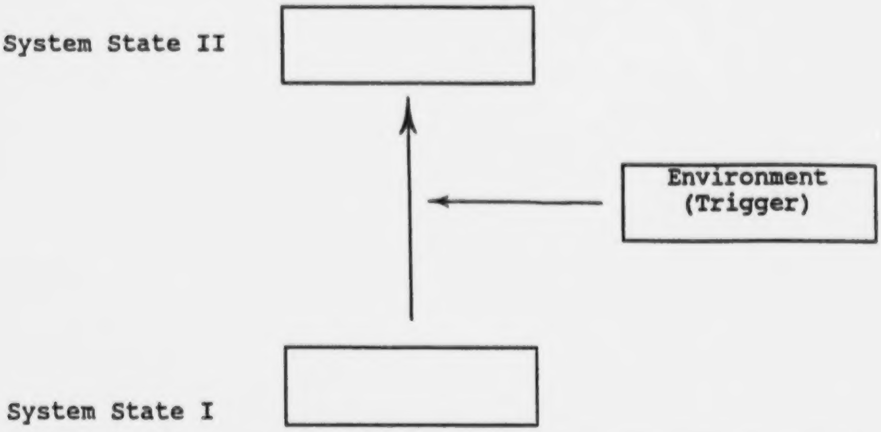
System State II
Environment (Trigger)
System State I

Figure 2. Basic Configuration of Generic Flow Chart Method to Show System Change

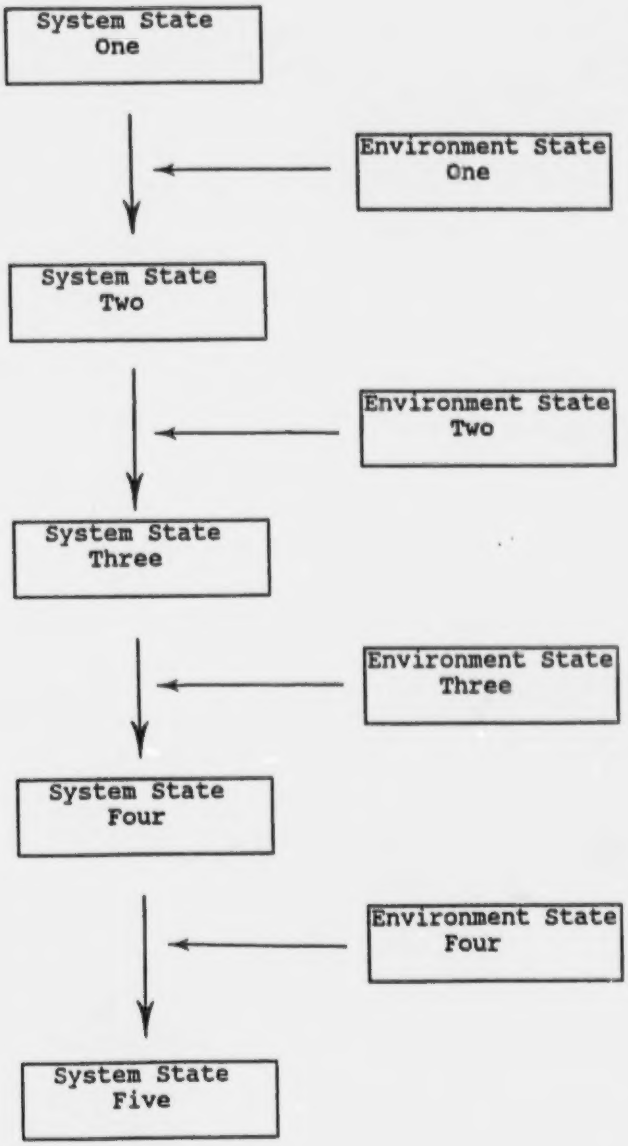
System State One
Environment State One
System State Two
Environment State Two
System State Three
Environment State Three
System State Four
Environment State Four
System State Five

Figure 3. Generic Flow Chart to Show System Change over Five Units of Time

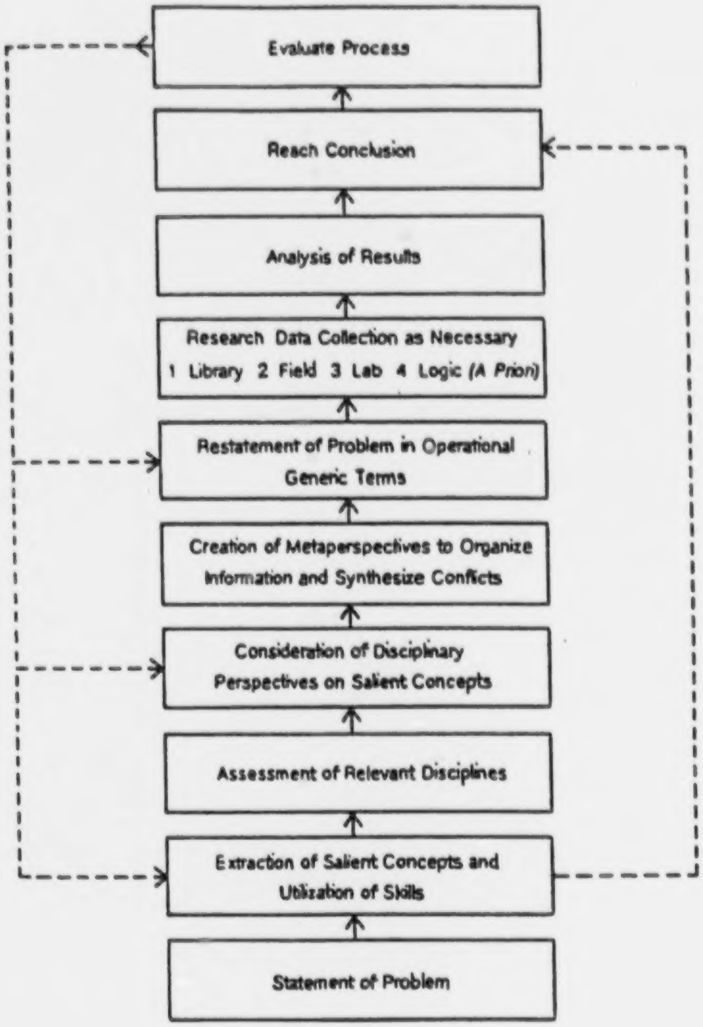
Evaluate Process
Reach Conclusion
Analysis of Results
Research Data Collection as Necessary
1 Library 2 Field 3 Lab 4 Logic *(A Priori)*
Restatement of Problem in Operational Generic Terms
Creation of Metaperspectives to Organize Information and Synthesize Conflicts
Consideration of Disciplinary Perspectives on Salient Concepts
Assessment of Relevant Disciplines
Extraction of Salient Concepts and Utilization of Skills
Statement of Problem

Figure 4. Interdisciplinary Process in Problem Study (Klein 1990:193)

PRESENTING MARSHA NORMAN'S *GETTING OUT*: THEATRICAL AND PHILOSOPHICAL PERSPECTIVES OF A STUDENT PRODUCTION AT THE KENTUCKY CORRECTIONAL INSTITUTE FOR WOMEN

Iverson L. Warinner
John R. Wilcox

> . . . the action of theater, like that of plague, is beneficial, for impelling men to see themselves as they are, it causes the mask to fall, reveals the lie, the . . . hypocrisy of our world . . . inviting us to take in the face of destiny, a superior and heroic attitude [we] would have never assumed without it.[1]
>
> Antonin Artaud
> *The Theater and its Double*

Introduction

Marsha Norman's *Getting Out* tells the story of a young woman recently paroled from prison. Frequent flashbacks to her past depict her incarceration and reveal the conditions that led to it. Because the play raises fundamental questions about the nature of good, evil, freedom, and justice, an interdisciplinary union between theater and philosophy seemed natural. On November 29, 1990, Spalding University Theater mounted the production for the residents of the Kentucky Correctional Institute for Women at Pee Wee Valley. Following the performance, barriers to communication fell, as a dynamic, interactive discussion on "what makes people good" occurred among the students, residents, and correctional staff. We believe that the students took a risk with this performance by confronting within themselves their own potential tendency toward criminal behavior. By doing so, they were able to identify and empathize with the inherent humanity of the prisoners, validating Artaud's theater vision of the "mask falling." This offered the students and the residents a unique opportunity to examine basic moral concepts within a theatrical context. This interdisciplinary approach heightened the learning experience of the event.

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The Play

Getting Out marked the playwriting debut of Marsha Norman, premiering six years before her Pulitzer Prize winning work, *'night Mother*. While living in Louisville, she researched *Getting Out*, at the same facility where the work was performed thirteen years later. When the students visited the facility for character preparation, they soon learned from residents that the main character was based, in part, not only on an inmate many of them knew, but also on her experiences while incarcerated. In the play, this reality of action constantly shifts between present and past.

In the present the play's narrative depicts the main character, Arlene, and the first two days of her most recent release from prison. Arlene is juxtaposed with Arlie, her alter-ego and past self. Both characters often appear on stage at the same time. Arlie introduces the audience to the social conditions leading to her troubled life that kept her incarcerated off and on for twenty-one years. The crucial question which Arlene faces at the conclusion of the play is whether she will be able to keep herself from going back to a way of life that will undoubtedly send her back to prison. From what the play tells us about Arlie, the chances that she will return seem great; however, from the way the play depicts Arlene, the sense of triumph over her past self offers hope for a rehabilitated future. During the post-show discussion, one inmate bluntly stated that ". . . getting out is hard, staying out is even harder." Another resident responded this way: ". . . if the only people we have to turn to are our former colleagues then we will have only our former lifestyle to model ourselves after."[2]

If *Getting Out* were a lesser, more simplistic, and thus unrealistic play, it would try to explain how the change in Arlene happens; perhaps it would show Arlie at various stages of development. Instead, the play builds its artistic and dramatic strength around the fact that it does NOT try to explain the change. It gives a clear portrayal of Arlie as someone who tortures frogs, causes trouble at school, and in Arlene's own words, is a "hateful brat."[3] It also gives an equally clear picture of Arlene as someone who is calm and restrained; knitting little sweaters for babies, wanting to take her son to the fair to eat hot dogs, and striving simply to be meek--or as she understands it, quiet and good--to "git the earth" (p. 61). In between these two starkly contrasting depictions, the play does offer some faint suggestions, but mostly it opens wide the question: how did the change happen? One resident stated, "Many women who return here after only a short period of time on the streets come back because they couldn't handle the many obstacles that were in their path."[4] The dimensions of this question were intensely explored during the post-show discussion. Many residents saw the change as a sign of hope.

IMPLICATIONS FOR TEACHING

Teaching Theater

Although theater production allows for creative learning, a play seldom allows for the shaping of a student's character. To be educationally effective, theater in a small university environment should transcend the act of production and interface with other disciplines. *Getting Out* provided a natural linkage between theater and philosophy. When we agreed to collaborate on this venture, we became challenged NOT to make the event a teaching exercise for us, nor an empty performance/academic exercise for the students, but a total learning experience for us all. Artaud's theater vision suggests that a mask must fall "inviting us to take . . . a superior and heroic attitude." The act of presenting a true story about "one of them" offered us such a tool. Early visits to the correctional facility by the cast and crew provided evidence that a common frame of reference existed, opening a strange yet positive rapport between the student and the resident. If *Getting Out* would allow us to recreate these people and see their life, then philosophy could show us how to question what we saw. We didn't realize we would see ourselves.

Teaching Philosophy

Because the basic structure of this play raises fundamental questions about the shaping of a person's character, the play proved itself to be an excellent vehicle for raising any number of related philosophical questions. Philosophers, of course, know that raising questions is a main objective of doing philosophy, but it has been notoriously difficult to bring students actually to realize that such a seemingly chaotic activity as raising questions could ever be the main objective of any subject that is taught in a college classroom. Our experience with *Getting Out* revealed to us how an interdisciplinary union could overcome this very problem.

Philosophical Questions Raised

Bringing the play to the prison audience breathed new life and depth into the tired old philosophical debate over whether the will is free or determined. How can the will be free, if changing is so hard? For a while, Arlene believes that her change must be total; she thinks she is able to keep herself from reverting to Arlie's kind of behavior only if she denies her basic identity with Arlie altogether. But how can she deny that she is Arlie? "Arlie coulda killed you" (p. 39) is what Arlene says to Bennie, a former prison guard who befriends her, after he attempts to rape her. But what about Arlene? Could she have killed him, too? Or is it only her total denial of her identity with Arlie that can stop her? Must one first change one's whole identity before one can change a single act? These issues related directly to the unique context of college students performing before the residents. When Bennie attempted his rape, the audience visibly expressed feelings of anger--they "coulda killed" him, too. How could we, as privileged college students and faculty, justify saying to the residents that since we have free will, changing their lives should be easy? On the other hand, how can they be held responsible if they don't have free will?

Further questions of Arlene's free will and of her relationship to Arlie are raised by the play's climax. Arlene faces a dramatic crisis when she finally realizes that her only alternative to reverting to her old life is to take a menial job as a dishwasher. It's very hard for her to see how that sort of life can have any future. With no clear vision of a future, how can she go on? She must create a new future, but with what materials? Is there some way she can reach deep within herself to find the true basis of her character? But if she reaches too deep, won't she find Arlie, whom she has rejected?

The play offers hope for a breakthrough when Arlene discovers that she can indeed gain strength from Arlie. At the very end of the play, Arlie talks to Arlene and reminds her of a time, when, as a small child, she had been playing a game with her sister, and her sister had locked her in their mother's closet and left her there. All alone in the darkness of that cramped room, Arlie exhibited a feisty independence of individual character as she "went around an' peed in all Mama's shoes" (p. 65). Arlene can laugh and celebrate who she was at that time from her past, and she can draw upon this memory to reconstruct her own story to help her through the difficult prospect of getting out and starting over, alone.

This ending may suggest a new way to think about the concept of the free will. Could it be that freedom depends upon how one constructs one's life story, along with the kind of vision this story holds for one's future? In constructing the life story that will pull us through a difficult crisis, perhaps we don't deny our whole past so much as we make selections from it. Which parts of our past will we draw upon for strength in constructing vision for our future? As students and faculty, considering this question in the company of prison residents brought new meaning to old questions. Perhaps, here is where we are free creatures.

Artaud's Heroic Vision Realized

The production at the Kentucky Correctional Institute for Women electrified us all. Over one hundred of the prison population, including residents, guards, warden's staff, and the warden herself, experienced the production at the prison "rec hall." Arlie's story about mutilating frogs as a seven year old opened the play. The audience response was immediate and unexpected. I suddenly realized that the rapport that had been established between the student and the resident was transcending to actor and audience. This feedback became such a catalyst for the production ensemble that they communicated the play's message of hope with a new and surprising fervor. The actress playing Arlene had a scene where she literally breaks down from the weight of her decision. In rehearsals, she had always played it "less is more"--intensity rather than raw emotion. However, that night, she cried openly and honestly. This is typical of the performance energy that sparked such cathartic responses that the production was often interrupted with thunderous applause, verbal support, and prolonged laughter. This is what theater should do, and be. Students were living the exhilaration of Artaud's heroic vision. The audience's veracious response prompted not only the actor's mask to fall, but the student's mask as well. Prejudices and obstacles that previously existed were replaced by similar values that unified the common humanity of each person present. This indeed was scary stuff; communication was occurring on a visceral level. In one resident's recounting of the experience, she noted that she ". . . was seeing some of [her] life performed in front of [her] very own eyes and it...broke me down."[5] One of the student actresses commented that this was "too real." Theater was meeting its potential.

The collective mask was falling. The post-show discussion, led by ethicist David Solomon of Notre Dame, provided over an hour of open, honest, and, at times, intense dialogue between the residents, students, and the prison administration. One of the first residents to speak said: "I've seen myself in that play. If I cry, I don't mind. I was abused myself, so I know. I also had a pimp in my life. When I came here I was probably the wildest thing there was, beyond Arlie. Thank you all for coming out here and teaching me some things." Another resident voiced that the play "has gotten my attention . . . it's hitting on the sore spots. This play has me thinking."[6] At one point, the discussion centered on the question of guards . . . and whether they were part of the problem. One resident confronted the warden about the abusive behavior, claiming that "just because the guards are not physically abusive, doesn't mean they aren't abusive." To which the warden responded that they attempt to weed out guards that exhibit any type of abusive behavior whatsoever. Much of the discussion was positive, complimenting the system that incarcerated them. In an emotional appeal to understanding about the criminal system, one resident argued that "some people do get rehabilitated in here because I'm one . . . the residents and staff have helped me."[7] The student who portrayed Arlie described the event as being full of "tears, laughter, heart, [and the] passion for the thread of humanity that weaves us together."[8] After the discussion, residents, students, faculty, and staff hugged each other. Many of the residents and students still remain close and correspond frequently.

One question that lingered in our minds prior to the production was what to expect? What exactly were we doing? Were we going to moralize, to entertain, or to confront the prison population? Or was it just simply another dress rehearsal? Whatever questions we had asked ourselves prior to the performance seemed to be overshadowed by the event itself. As director of the play, I began to watch the run-through with a critical eye.

The response of the audience pulled me from the role of director/critic and thrust me into the role of active participant. We were realizing what "art can do." By taking the risk to leave non-criminal values behind, and enter a prison world, students were achieving a heroic stature. Their performance of *Getting Out* not only made a difference in the lives of the residents, but it also made a difference in their lives as well. Joseph Campbell suggests that "the basic motif of the universal hero's journey [is] leaving one condition and finding the source of life to bring forth a richer or mature condition."[9] He further argues that ". . . when we quit thinking primarily about ourselves and our own self-preservation, we undergo a truly heroic transformation of consciousness."[10] Students had taken this heroic risk when they undertook this venture . . . and left with the knowledge that they had "done good."

Conclusion

Perhaps it was a false expectation on our parts to assume that the performance could help to rehabilitate anyone's character. Perhaps it was a false assumption on our part that the residents would have more to learn from us than we would from them. Perhaps it was just enough that the performance simply allowed us to share with the residents a common sense of our humanity. Throughout the performance, the residents had identified so strongly with Arlie. To us from the outside, it was reassuring to see their positive response to Arlene's message of hope when she burned the matches, deciding to become a dishwasher and NOT to return to a previous life of criminal behavior. The challenge that remains for all of us is how to keep her hope alive. We, on the outside, have a moral responsibility to support her and every person who may have that same hard decision. We must, also, support ourselves. One student observed that ". . . *Getting Out* while being in will make me ever mindful of our responsibility to our fellow human beings, and the improvement of a social order that will render correctional institutions obsolete."[11] When we learn to work together, that's the kind of education that could enlighten us all.

Endnotes

1. Antonin Artaud, *The Theatre and Its Double*, (New York: Grove Press, 1958), p. 31.

2. "Captive Audience . . . Inmates moved by Spalding students' production of prison drama," *The Courier-Journal*, 1 December 1990, p. A-7.

3. Marsha Norman, *Getting Out*, performance ed. (New York: Dramatists Play Service, Inc., 1979), p. 30. All subsequent references to the script will identify the appropriate page number in this performance edition parenthetically within the text.

4. Sheri Hyden, et al, "Opinions from Inside," *Spalding University News*, Winter, 1991, p. 8.

5. Ibid.

6. "Captive Audience . . .", p. A-7.

7. Ibid.

8. Sherree Burdette, "Creating Arlie," *Spalding University News*, Winter, 1991, p. 6.

9. Joseph Campbell, *The Power of Myth*, with Bill Moyers, (New York: Doubleday, 1988), p. 124.

10. Joseph Campbell, p. 126.

11. Buddy Schardein, "Getting Out While Being In," *Spalding University News*, Winter, 1991, p. 8.

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MEETING THE NEEDS OF SPECIAL CONSTITUENCIES

ADJUSTMENT ISSUES OF NON-TRADITIONAL FEMALE GRADUATE STUDENTS: CHANGING OUR INSTITUTIONS TO MEET THEIR NEEDS

Janice Andrews
Serene Thornton

Brief Look at the Literature

A growing trend in higher education since the 1970s has been the movement for adult education. While at first not a mainstream activity the older, non-traditional student seeking a degree in recent times has become a dominant group in higher education. Specifically, re-entry non-traditional aged women have become the fastest growing segment of students attending college.

There are a variety of studies which describe characteristics of the returning female student. The demographics are very similar in all studies and very similar to the group of students in this study. Studies have shown the major stress points to be management of time and management of family, followed by finances and scheduling of classes. Women exhibit increased confidence, reduced generalized anxiety, and improved relationship with their partner and children after becoming students. (Scott, 1980) Data from one study (Gerson, 1985) shows that when women add role obligations outside the home, the results are positive as well as negative.

Perhaps the major change in the make-up of the re-entry students in the past decade is the degree to which the students are balancing not only a school schedule and family life, but, for many, a job which is often full-time. Environmental changes of the 1980s and 1990s which have resulted in the two wage earner family and the single parent family and simultaneously, the reality of needing advanced education for many of our service sector jobs, will no doubt continue to place stress and raise issues for the non-traditional student.

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Theoretical Framework

General Systems Theory (Hearn, 1979) which emphasizes systems as either open or closed with both inputs and outputs, is useful as a theoretical starting point. Following a branch of that theory, one can view female students within an ecological systems framework where the interactions between the organism and the environment are crucial for the survival of each. Any change in one will have an effect, positive or negative, on the other. In Social Work, we speak of the concept of "person-in-environment" to explain these person-situation interactions. The work of William Gordon (O'Neil, 1984:8) is particularly applicable to this study; he suggests that there must be a simultaneous dual focus on both the person and the situation, and on the system and the environment.

An ecological systems framework focusing on the person-in-environment aids in analyzing the struggles experienced by returning, non-traditional female graduate students and helps to explain the impact of social and environmental factors on the academic lives of these students.

Demographics

The academic program under study offers a graduate degree in social work (MSW) over a period of 1 1/2-4 years depending on which track the student chooses. This new program accepted its first students Fall, 1990, and has been designed to meet the needs of the working professional. Thus, classes are offered late afternoons and evenings and occasionally on Saturdays.

On the average, Fall semester, students took 8.83 credits although this ranged from 3-15 credits among 54 students. The students vary in age from 24 years to over 50 years of age with the average 35 years. Eighty percent of the students are female which is typical in graduate social work programs. The majority (56.6%) are married with 92% being white and 92% residing in the Twin City Metropolitan Area.

Research Design

This study was conducted because faculty of a new graduate program for working professionals are interested in learning about their students' adjustment problems so that the institution can provide an environment which reduces the stress the students are experiencing.

The research design is both exploratory and descriptive, employing two self-administered instruments, the Index of Family Relations and the Index of Peer Relations (Hudson, 1982) and an open-ended survey developed by the authors as a follow-up to the instruments. The self-administered instruments are unidimensional measures of a problem -- they were designed to measure the degree, severity, or magnitude of problems related to family and peer relations. The scales are capable of revealing both minor and serious problems that people have in several areas of personal and social functioning. Data collected over a period of several years supports the validity and reliability of the scales. The cut-off for indicating a clinically significant problem in the area being measured is 30 (the higher the score, the more severe the problem) and the standard error of measurement is roughly 5-6 points.

Results of the Family and Peer Relationship Scores

As Charts #1 and #2 indicate, the students in general do not exhibit clinically defined disorders related to their families (average score of 18.18) or to their peer (average score of 13.15) relationships. However, there is some concern that at least 20% of the students do have serious clinical issues about their family: it can be said that they are experiencing family dysfunction. Also, the wide range of scores (0-66) concern the faculty and present a challenge to create an academic environment conducive to the students. The students were far less likely to be engaged in dysfunctional peer relations (6.6%) and the range was not as wide (0-42). This probably is a function of age on the one hand and on the availability of others for peer support on the other hand. Students who used personal friends for support were the most likely to have higher (more severe) family scores; students from ages 30-40 had the more severe family scores.

Results of Open-ended Survey on Re-entry Women

As results of the survey on re-entry women indicate, relationships with friends are deeply affected as well as time with husband, family and self. (see Chart #3) In a follow-up question regarding the adjustments that had been made to return to school, the female graduate students report that other major adjustments include restructuring finances (50%), husband or partner assuming more responsibility for the household (46%), children assuming more responsibility for themselves (40% of those with children), restructuring time (35%), less time at work, and with clients and co-workers needing to be flexible (31%).

The results to the questionnaire also demonstrate that the majority of the students have a feminist perspective with issues of discrimination of women in employment areas and experiences as battered women increasing their ability to empathize with client situations. A smaller number of students refer to their experiences as caretakers and household responsibilities.

Referring to Chart #4, respondents indicate that they have returned to school at this point in their lives because they are seeking flexible employment choices and seeking to reach career goals. Additionally, over one-third of the women want to achieve competence in their discipline, social work. The current students have advice for those who are considering becoming re-entry students: be aware of the tremendous changes necessary and make sure that these changes be communicated clearly to those most important to them in their lives. Psycho-emotional needs such as group support, letting go of perfection and believing in oneself are also deemed very important.

As our institution seeks to better meet student needs, re-entry women indicate that financial issues are central such as more financial aid and reasonable cost of textbooks (50%). Nineteen percent state that the faculty and staff are already great, while 15% want more care taken in scheduling classes and 15% emphasize openness and flexibility as essential.

The authors questioned what effect the return to school had had on self-esteem. Fifty-four percent indicate it has improved their self-esteem, 27% feel that there has been "no change", 12% believe that their self-esteem has been decreased and 8% state that it is both improved and reduced at the same time.

Implications

Re-entry female graduate students indicate that finances are a major stressor in their lives. Clearly, the department within the larger institution must assist students in obtaining graduate assistantships and greater access to financial aid monies in the form of grants as well as loans. Institutions must offer courses during evenings and weekends recognizing that, for most students, the daytime hours are spent at work.

Another major theme is relationship hardships including relationships with friends as well as family members. For many of the students, nurturing these relationships and benefiting from them becomes a difficult, if not impossible, task with the drastically reduced number of leisure hours available to them. Again the institution can help the students develop support groups to assist in providing this need. To help clarify the meaning to the family of one of its members returning to school, the program is working on integrating a family segment into student orientation before entrance into the program.

These conclusions become even more poignant when we look at the results of the family and peer relationship scores and see that, for some of the students, clear-cut clinical issues are present. The challenge for institutions of higher education who are being confronted with an older, more complex, albeit exciting, cadre of non-traditional students, is to understand the larger environment's impact on already stressed family systems and to develop programs which fully understand the needs of this unique group of students.

Chart #1
Family and Peer Relationship Scores (N = 45)

	Family Scores	Peer Scores
Overall Range	0-66	0-42
Overall Mean	18.18	13.15
Percent Scoring Above Cutoff=30	20%	6.6%

Chart #2
Family and Peer Relationship

Scores by age, partner status, income,
parenting, source of support
(N = 45)

Chart #2A

Age	Family Score	Peer Score
24-29	17.46	12.2
30-34	24.00	17.6
35-39	20.50	12.6
40-44	15.60	10.0
45-49	08.60	08.0
50-54	17.60	14.6

Chart #2B

Partner	Family Score	Peer Score
Single	22.83	15.60
Single, living with partner	37.00	07.00
Married	15.46	11.65

Chart #2 (continued)

Chart #2C

Income	Family Score	Peer Score
Under 20,000	24.75	26.75
21-29,000	18.59	12.94
30-39,000	21.60	11.00
40-49,000	23.00	15.80
Over 50,000	14.61	09.23

Chart #2D

Parenting	Family Score	Peer Score
Children in home	13.26	12.8
Children not in home	16.3	12.6
No Children	23.04	13.5

Chart #2E

Source of Support	Family Score	Peer Score
My Friends	24.38	13.15
Other Students	06.00	42.00
My Partner	15.45	11.40
Other Family Members	11.00	11.50

Chart #3:

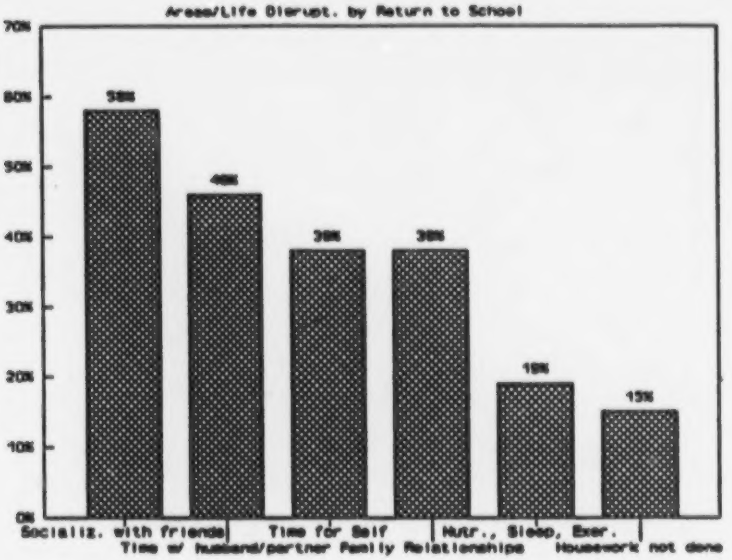


Chart #4:

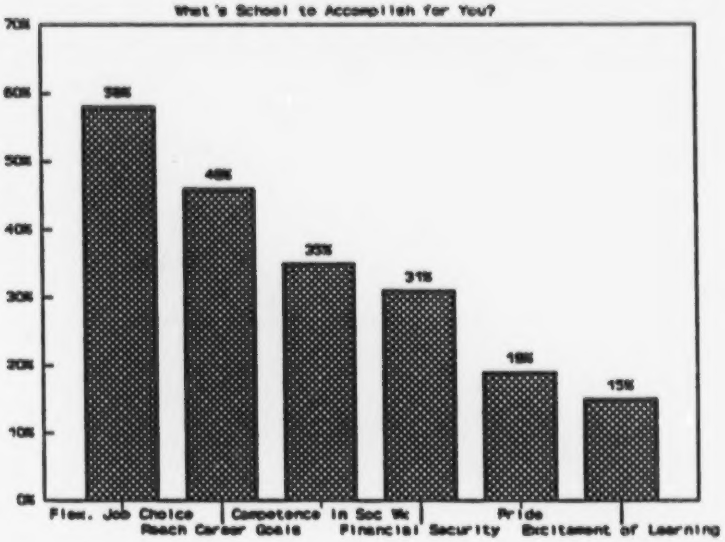
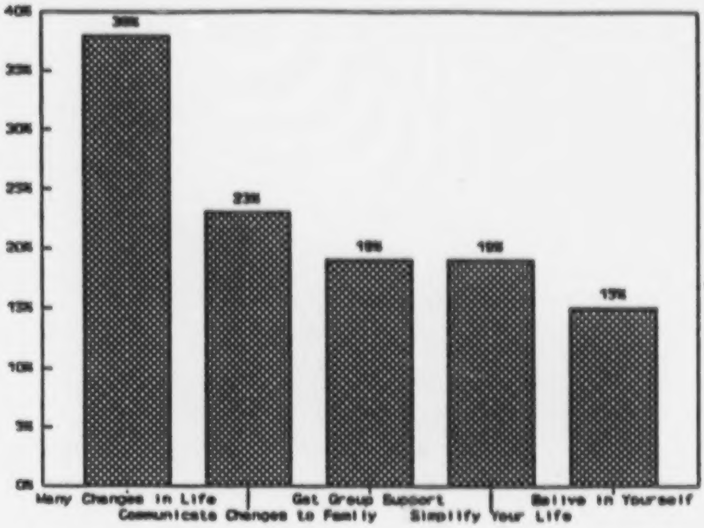


Chart #5: Advice to Re-entry Women



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WHY GO TO NIGER?

Elizabeth Brewer
Karen Boatman

Context

Three issues form the context of this paper: 1) The U.S. is changing demographically. Its population's ethnicity is increasingly non-European. 2) The world is increasingly interdependent, and U.S. economic needs demand more involvement with the southern Hemisphere. However, the U.S. is inadequately prepared to understand the global arena and participate in it. 3) There is increasing concern among educators and the business community that undergraduate education does not sufficiently prepare students for their post-graduate lives. U.S. educational institutions must develop strategies and methods addressing these three areas of concern if they are to produce responsible citizens competent to cope with changing local and global realities. This paper is a case study of an interdisciplinary, non-traditional, overseas program in West Africa that addresses these three issues.

Program Justification

In 1985, Boston University's School of Education (SED) resolved to make cross-cultural understanding an integral part of its curricular outcomes. Students would be required "to have an intensive experience where the majority of the learner population is from a culture or cultures different from that of the college student [Warren, 1984]. SED was concerned that without such a cross-cultural experience, its graduates would be inadequately prepared to work effectively in educational settings, whether formal or nonformal, that are becoming ever more culturally diverse. Over 50% of U.S. classrooms, for example, already have at least one pupil who is not a native English speaker. Most education students, however, are white and from small towns or suburbs, and have had little exposure to foreign cultures or languages [Zimpher, 1989].

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SED also felt that an in-depth cross-cultural experience would help it further its mission to graduate not only effective practitioners, but also responsible citizens. It wanted its students "to see beyond themselves and better understand the interdependent nature of the world" [Boyer, 1990:77].

SED decided to allow a period of foreign study to satisfy the cross-cultural requirement. Properly designed, such study could have several benefits over an on-campus program. Participants could be the opportunity to learn a foreign language, something most education students do not do while undergraduates.[1] They could experience full cross-cultural immersion, extending from the classroom to field work to daily living. Additionally, they would gain international perspectives and, in the role of a cultural and linguistic minority in the host country, gain affective insights on that social reality. Finally, a period spent overseas could accelerate the participants' maturation.

The curriculum of existing study abroad programs, however, did not encompass courses that would permit education students to fulfill major requirements overseas. Nor did they have the field work that becomes the laboratory in which SED students test their theoretical learning. SED, therefore, decided to design its own programs, and to locate them as much as possible in non-English speaking, Third World sites. These settings receive inadequate attention in U.S. education. They also would enhance the learning experience by providing the students with the best opportunity to experience being a minority. Moreover, research suggests that study abroad students experience more growth in countries very different from their own in terms of increased awareness of different philosophies, cultures and ways of life; tolerance and understanding of other people and their views, and particularly important here, greater understanding of their own abilities and growth in their abilities to reason and think in quantitative terms [Pfnister, 1972].

Program Development and Design

In 1985, planning began for a program that would be piloted in 1987. The Niger Program would quickly become the centerpiece of SED's overseas programs. It involved language acquisition, satisfied education requirements, included ethnographic research and field studies, and had liberal studies courses. With these components, the program broke new ground.

Niger is not an obvious site for study abroad. It is Moslem, located in Francophone West Africa, and belongs among the world's poorest countries. Few Americans live there; those who do are mostly on two-year assignments with the U.S. government or development agencies. On those rare occasions when West Africa appears in the U.S. news, Niger is seldom included. Thus, the vast majority of Americans have little or no knowledge of the country. Moreover, Africa is a rare goal of study abroad students. The 1988-89 IIE Open Doors statistics on study abroad show only 1.2% of all U.S. study abroad students in Africa in 1987/88, or about 750 students [Zikopoulos, 1989:81]. This small number is not likely to increase soon. Of 17 diverse institutions reporting in a recent survey their efforts to diversify study abroad by establishing programs outside Western Europe, only two intended to establish programs in Africa [Brewer, 1991].[2]

Niger nevertheless is a particularly appropriate site for SED's purposes. It is politically stable and its capital city, Niamey, where the program is based, is less burdened by urban troubles than most West African capitals. Though health concerns must be taken seriously, health facilities in Niamey are good. Niamey and the surrounding area's resources extend to excellent opportunities for field work. Potential field sites include a remarkable living museum dedicated to the practice and preservation of Sahelian crafts and history, a large variety of Nigerien schools, and many development agencies. The country is also characterized by diverse ethnic and language groups, which transforms it for the students into a research site for multi-cultural studies.

Education students are not very much better represented in study abroad statistics than is Africa. The same survey of institutions mentioned above includes four for whom education is one of the three majors with highest enrollments. All four show education students underrepresented among their study abroad populations. Inhibitors to their enrollment range from tight curricular requirements to lack of foreign language competency, inadequate opportunities, and lack of faculty and administrative support.

Study abroad programs that include an experiential component are also atypical. Most institutions of higher education have yet to develop strategies to assess experiential education for credit purposes. Involvement in the local community through volunteer work may be encouraged, but outside the context of coursework. The institutions fear that this activity will not receive adequate treatment within a theoretical framework. Both because it is more difficult to supervise coursework from afar, and because the curriculum of many study abroad programs is courses at a foreign university, many institutions are even more reluctant to award credit for overseas experiential education. This is regrettable because of the opportunities thus lost. Many educators agree that "it is the intercultural and experiential dimension of study abroad that provides its often life-changing meaning and significance [Hoffa, 1990:39]." Within this context, the development of opportunities for credit-bearing field work became especially critical for SED.

From the beginning, the Niger Program was able to accommodate not only education students, but students from liberal arts and professional schools such as communication. The curriculum is firmly based in liberal studies, in the belief that this approach best prepares students to think and analyze, to communicate, to make decisions, and to place the immediate problem within a larger context. Much of the coursework, therefore, is directly applicable to other students' majors. At the same time, through its educational lense and its field studies, the program opens up new avenues of inquiry, research, and application to the non-education student.

Inter-Institutional Cooperation

Niger was particularly appealing as a site because faculty and staff at the University of Niamey and Boston University already worked together.[3] The student program would enable both universities to extend productively the nature of their cooperation and expand the number and kind of participants.

The University of Niamey follows a European calendar. Its instructional program begins in late October and ends in June. Niger in spring is terribly hot, and can reach temperatures of 120F. These two factors persuaded both institutions that direct enrollment in University of Niamey courses would be impractical. The institutions, therefore, developed a special curriculum for the program, which would satisfy SED curricular requirements, but incorporate material and approaches appropriate to the Nigerien context and the expertise of the faculty who would teach the courses. An agreement between the two institutions, approved by the Nigerien government, designated the Dean of the Faculty of Pedagogy at Niamey as the responsible official in Niger for the program, and gave the program status as a University of Niamey activity. This status in turn made the program participants University of Niamey students, even though they enrolled in a special curriculum, and it enabled them to conduct research and carry out field studies without separate permit.

In close collaboration with the Boston University responsible official, the Dean chose faculty to teach the courses. Their interest in the student program lay in large part in the opportunity to experiment with alternative curricular approaches: modular courses, criterion-referenced evaluation including student participation, and credit bearing field work. The faculty would, of course, also earn additional income by participating in the program, and they are paid a course stipend based on University of Niamey salary rates.

Curricular Program

At the center of the curricular program is a core course called Language, Culture, and Society. Since Niger is a Francophone country, the students' coursework is conducted in French, with the exception of the culture and society component of the core course. Furthermore, functional knowledge of one of the African languages spoken in West Africa is developed, since a minority of Nigeriens speaks French. Because knowledge of French and Hausa is so crucial to the students' success, intensive instruction in these two languages begins as soon as they arrive, and the course assumes a major role in their month-long on-site orientation. Field trips within Niamey and to other parts of Niger serve as opportunities to exercise new linguistic skills, and to make observations related to the culture and society component of the course. After the first month, the course continues at a non-intensive level.

The core course carries variable credits, from 4 to 12, depending on the kinds of projects the students carry out within the course structure, the scope of their language studies, and their curricular needs. An education student typically takes the course for 4 credits because of a need to satisfy other requirements. African Studies and French majors, on the other hand, frequently take the course for more credit, and register for separate courses in Hausa and French. The variable credit is made possible through placement of the students in language sections according to proficiency level, and testing at the beginning and end of the course to determine language acquisition.

A second course required of all students similarly carries variable credit. SED students take the course as Community Education, fulfilling a practicum requirement of 4 to 8 credits. Other students take this as a directed studies course. The scope of the course depends on the nature of the students' project, as this is the course in which students have a field placement. Working with a supervisor from the field site and a faculty advisor, the students design and carry out a project. This is the most exciting of all the courses, as it holds potential for the student to become involved with Nigeriens in common work. The student not only learns this way, but also contributes.

Students work from 10 to 20 hours a week at their sites, and in conjunction with this work carry out theoretical studies in the form of readings, data gathering and analysis, and interviews. A field log is kept throughout the course, and a final analytic paper written. In some cases, a product emerges from the course: for example, a guide to the National Museum, or a film on agricultural techniques. In other cases, the field work may take the form of teaching English - to artisans who hope to learn to converse with tourist customers or Nigeriens wishing to study abroad - or assisting with resource development at a Nigerien school. The course demands the most of the students. They must be independent, able to act on their own initiative, and they must be flexible. The course insists that they develop effective inter-cultural and cross-cultural communication skills, and that they apply learning strategies not bound by traditional classroom learning styles. However, if it is the most demanding, the course potentially also holds the most reward.

Supplementing these two courses are courses in educational reform, Francophone literature, special needs from an African perspective, and oral history. Course equivalencies have been established in the College of Liberal Arts at Boston University, so that credit transfer does not prevent the enrollment of liberal arts students. Communication students have applied the coursework toward their liberal arts requirements, and students from other institutions enrolling in the program receive liberal arts credit.

Why the Program Works

The Niger Program's success lies in its careful design, development, and implementation through inter-institutional cooperation. Both the curricular and extra-curricular components are rooted in efforts to meet the interests, philosophies and expectations of the two institutions, and to make appropriate use of their resources.

The program is self-supporting. The students pay Boston University's regular fees for tuition, room and board. These fees then cover the program's costs: local living and transportation costs for the students, including the month-long on-site orientation; round-trip transportation; on-site visits by the Boston University responsible officials in July and December; and field trips. A three-day pre-departure orientation and a re-entry program of several meetings in the spring semester are also covered by the fees. The pre-departure and reentry sessions help the students gain an intellectual understanding of their experience in Niger, and of the transition from one culture to another.[4] The program's budget has been supplemented by grants to provide, for example, computer equipment to the University of Niamey.

The program is designed not to make unrealistic demands on the University of Niamey, which does not, for example, provide student life services and has severe space problems in terms both of classrooms and dormitories. With the aid of the university, housing and classroom space was located in a literacy center near the center of the city. A part-time American advisor and a Togolese resident assistant were hired to address student life issues.

Outcomes

The Niger Program is young, but the outcomes indicate it is accomplishing its goals. Its curricular approach combining liberal studies with field work has proven appropriate for both education and other students. While of particular interest to students in fields for which an African focus is useful - French, comparative literature, economics, development studies, history, international relations, political science, linguistics - the program has shown that study in an impoverished, non-English speaking, black country can be of direct relevance to many kinds of students' education and development.

Participants have found that concepts difficult to observe at home can be seen more clearly in a radically different setting: how multi-ethnic societies function; the role language plays in identity, culture and politics; how nations' foreign policies affect other nations; the impact of technology on the environment and the complexity of environmental questions; how educational policies are developed. The program also has been successful in the area of language acquisition. Students who arrived in Niger with virtually no French have left able to carry on complex conversations.

Two of the participants have since received Fulbright grants to continue their studies, and those who have been graduated as teachers variously teach in poor, urban school systems or are pursuing plans to enter the Peace Corps. Virtually all of the returnees have reported a need to redefine themselves in light of the differences they experienced between Nigerien and American cultures, a desire to increase their work with urban and poor populations, and a new belief that social harmony is more important than individual material acquisition. It is hoped that long-term effects can be examined through a longitudinal study of how immersion and field work in radically different cultures affect career choices, career achievements and citizenship roles. A funding proposal is being prepared to this effect.

The program has also been successful in terms of its stability. It has grown from an initial enrollment of two students in its pilot year to thirteen in fall 1990. It promises to continue to enroll between ten and fifteen students each year, including a new population of graduate students, despite events such as the Gulf Crisis, which damage enrollments in study abroad programs, especially in non-traditional sites. Moreover, the program has successfully run each year despite the series of strikes that have disrupted classes at virtually all West African universities over the last four years in response to scholarship cutbacks forced by World Bank and IMF policy changes. When the program was first developed, it was hoped that it could be integrated at least partially into the University of Niamey. Ironically, the location of housing and classrooms outside the Cite Universite and the special curriculum mean the program has been largely undisturbed.

At the same time this separateness has shielded the program, a further marker of the program's success has been the cooperation between the two institutions in its administration and in the design and implementation of its curricular program. Cooperation also continues on other levels. Faculty from the University of Niamey come to Boston University to conduct research and to teach West African languages, Nigerien students come to study, and Boston University faculty and students conduct research in Niamey. Several Boston area teachers and principals have asked to join the on-site orientation to increase their knowledge of Niger and its social/political and educational systems. A proposal is also being submitted by Boston University to host a Hausa language institute in Niger in summer 1992.

Nigeriens involved in the program view the development of educated, active and responsible citizens as the program's most important contribution. They believe that if young Americans can acquire an understanding of society as it is valued by Nigeriens and West Africans, this will create a more informed understanding of Africa in the United States. American-African relations may improve eventually as a result. Nigerien life and society is shaped by group identity and organization: family, cohort, peer, religious, and ethnic factors create an order quite unlike American individualism. The problems of group living and group decision-making that face the Boston University program students in Niger echo the experiences of every Nigerien. These lessons are hard for the program students, but they have stayed with each upon their return to the U.S.

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Endnotes

1. This may change in the near future. The State of New York has proposed changes in teacher certification which begin with students graduated in 1993, would require foreign language study for k-3, 4-6 and k-6 teacher certification [Commissioner of Education, New York, undated].

2. In contrast, the institutions planned nine new programs in Asia, six in Eastern Europe, eleven in Latin America, three in the Middle East, three in Oceania, and four encompassing multiple regions [Brewer, 1991].

3. A USIA grant had provided the institutions with funding for cooperation in the areas of equal educational opportunity, scarce resource use, computerization, in-service programs, and bi-lingual education. Furthermore, Boston University has a well-established African Studies Center, an International Education Development Program in SED, and several of its faculty have extensive experience in Niger.

4. Studies which examine the phenomenon of intercultural transition are relevant here. Koester proposes that by "increasing intellectual understanding of both the intercultural experience and the intercultural reentry, individuals will be better equipped to translate their knowledge into social and professional endeavors which recognize and celebrate cultural diversity [Koester, 1984:252]." Further, LeBrack argues that a bridge be built between pre-departure and reentry orientation programs to insure that "students maximize their overseas sojourn as well as accomplish a reentry which utilizes and integrates that experiential learning with their on-going post-experience academic and personal life [LeBrack, 1986:242]."

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WOMEN'S WAYS OF GROWING

Rosemarie Carfagna

Introduction

The Ursuline Studies Program is a required series of writing-intensive interdisciplinary courses totalling forty-nine credit hours that serves as the liberal arts core of an Ursuline College education. It highlights personal development, the cultivation of academic abilities, and the exploration of a coherent, integrated body of knowledge drawn from a variety of content areas.

Theoretical Foundation

Five years ago a long-range planning committee, including representatives of the Board of Trustees, administrators, faculty, professional staff, alumnae and student body, initiated a review of the college mission statement and the core curriculum. First, a task force of faculty members and a representative of the Board of Trustees revised the mission statement. This document was then processed through division, faculty and college-wide meetings over a period of two years. Next, the faculty members who had served on the first task force became the nucleus of a new task force that was expanded to include representatives from the areas of the fine and applied arts, the humanities, the natural sciences, the social sciences, business, education, and nursing. Also included were representatives of a newly-formed Committee on the Education of Women. This group, chaired by the Vice President for Academic Affairs, developed a model for the core curriculum which articulates the values expressed in the mission statement, especially those values associated with its identity as a Catholic liberal arts college for women.

This mission statement enjoins members of the Ursuline community, as it always has, to consider the fundamental questions about the world of nature and human existence that are the concerns of classic works of the liberal arts tradition. It also conceives of education as the development of complex abilities. Recognizing what recent research indicates about the preferred learning style of women, it speaks of the learning experience as a collaborative one. Thus, the task force has created a model for a core curriculum that integrates content into a structure that provides the challenge and support necessary for the intellectual and ethical development of women.

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Assumptions, Goals and Outcomes

Before constructing that framework, the task force adopted a set of broad developmental goals for the core curriculum at Ursuline College that are best stated in the terms of the four authors of **WOMEN'S WAYS OF KNOWING**. They outline the approaches to reality which characterized women college students at various periods in their development in the following way:

Developmental Stages

1. Received knowing: students view knowing as listening to the voices of authorities whom they conceive of as sources of truth;

2. Subjective knowing: students view knowing as an intuitive reaction to personal experience;

3. Procedural knowing: students view knowing as a process of looking at reality through a variety ofperspectives;

4. Constructive knowing: students view knowing as the integration of knowledge that they feel intuitively is important with knowledge that they have learned from others, and they strive to translate their knowledge into action.

Academic Outcomes

The task force and faculty agreed that Ursuline students should develop seven skills through their experiences in core courses and attain designated stages of competence as established by the faculty. Sister Gerogene Loacker of Alverno College in Milwaukee, Wisconsin, assisted the faculty in this process. The competencies listed below are the result of work begun by her and others from Alverno College during their visits to Ursuline.

Next, the task force and faculty worked out detailed descriptions of the competencies. Each competency was developed through a series of stages, corresponding with the developmental stages outlined in **WOMEN'S WAYS OF KNOWING**. The learning competencies are listed below. The criteria for identifying the stages of development were carefully defined and presented to faculty to be used in the planning of their course syllabi.

To Analyze and Synthesize

. . . to analyze - the process of separating and examining to distinguish constituent elements

. . . to synthesize - the combination of parts or elements into a whole

To Communicate Effectively

. . . to exchange ideas, thoughts, opinions or feelings through a common system of language, symbols, signs or gestures appropriate for everyday living

To Interact Socially

. . . to engage in behavior that permits her/him to relate effectively and successfully in both one-to-one and group situations

To Make Decisions Based on Values

. . . to make discriminations based upon the consideration of what the individual prizes as ethical, socially worthwhile, good, beautiful, and true

To Respond to Beauty

. . . to actively integrate the cognitive and affective domains in a personal experience of the arts

To Solve Problems

. . . to find a solution to a question/situation that presents uncertainty or difficulty

To Take Responsibility for Society

. . . to accept the obligation to respond to unjust or oppressive social situations

Learning Perspectives

In addition, the Committee established a set of learning perspectives, a substantial number of which are to be clearly included and recognized in all courses to be used in fulfilling core curriculum requirements. Each course in the Core Curriculum needs to represent several of the following perspectives:

COLLABORATIVE: learning is collegial, cooperative, connected; it takes into account issues of gender, race and class

GLOBAL: learning takes place amidst a wide variety of cultures

HISTORICAL: learning provides an understanding of ourselves and society in relation to the human condition over time

PHILOSOPHICAL: learning is built around values and meaning

RELIGIOUS: learning respects the spiritual dimension of life

SCIENTIFIC: learning involves inquiry, posing hypotheses, and systematically supporting them

Finally, the task force constructed a three-stage framework which provides students with content in the arts, literature, history, the natural and social sciences, mathematics, philosophy and theology. Courses are taught in both disciplinary and interdisciplinary contexts. Learning experiences foster the development of the seven competencies.

Framework and Criteria

The Ursuline Studies Program consists of three "anchor" courses, one for each stage of development, and eleven additional courses drawn from the academic departments of the College redesigned and reconstructed in light of the goals and objectives of the Ursuline Studies Program.

Any department or Division is free to design courses to meet a particular requirement of the Ursuline Studies Program. However, it must:

a) contain a substantial writing component;

b) be appropriate for the stage for which it is intended and include operational strategies to move students to the appropriate stage of knowing;

c) clearly articulate the expected competencies and show how they are to be attained;

d) explicitly show how a substantial number of the perspectives are present in the course;

e) be reviewed by the Ursuline Studies Committee for eligibility and be approved both by the Committee and by the Director of the Program;

Curriculum

Each of the three stages of the Ursuline Studies Program features a specially designed anchor course that holds the courses for that stage of the curriculum together. These interdisciplinary courses convey the main themes, developmental goals, and academic goals for each stage of the curriculum. Course descriptions for the three anchor courses are as follows:

Stage One: Introductory Seminar

This seminar serves as a transition to the college experience. It is a six-credit, writing-intensive course which gives students the challenge and support they need for high achievement in their college careers. It offers diversified learning activities that strengthen students' abilities to speak and write effectively, to interact with others in groups, to read and interpret challenging texts, and to progress smoothly through the remainder of their studies. Individual seminar topics may vary. Each seminar deals with four main themes: **EDUCATION**, **IDENTITY**, **MEANING**, and **VOICE**.

The Introductory Seminar is offered in a variety of formats to meet a variety of student needs:

US 101-102:	a six-credit, two semester course for new students of traditional age
US 111:	a six-credit, one semester course for returning adult students
US 112-113:	a six-credit, two semester course for returning adult students

The Introductory Seminar is taken prior to or concurrently with Stage One courses in the Ursuline Studies Program.

Along with the Introductory Seminar, students select courses from the content areas of Science (Biology, Chemistry, Science), Math, Society (Sociology) and Self (Psychology). A variety of courses in the natural and social sciences may fulfill these area requirements. Students make their choices from among those offered each semester in each area and identified as fulfilling the Ursuline Studies Program requirements.

Students must complete Stage One requirements for the Ursuline Studies Program before beginning Stage Two.

Stage Two: Introduction to Culture

Introduction to Culture, the anchor course for Stage Two of the Ursuline Studies Program, is a six-credit, two-semester, team-taught interdisciplinary course. It identifies key cities from a variety of historical periods and global areas, and studies their culture from the viewpoint of humanities and the fine arts. The course is writing-intensive and students actively pursue individual and group research.

Introduction to Culture is taken prior to or concurrently with Stage Two courses of the Ursuline Studies Program.

Along with the Introduction to Culture course, students select courses from four related areas: World Culture, Western Culture, American Culture and Fine Arts. A variety of courses in the humanities and fine arts may fulfill these area requirements. Students make their choices from among those offered each semester in History, Philosophy, Literature, Religious Studies, Foreign Language, Art, Music and Drama, and identified as fulfilling the Ursuline Studies requirements. Students must select courses from at least three different departments to fulfill these requirements.

Students must complete Stage Two requirements for the Ursuline Studies Program before beginning Stage Three.

Stage Three: Culminating Seminar

The anchor course for Stage Three of the Ursuline Studies Program is the Culminating Seminar. This is a writing intensive, interdisciplinary course focusing on the themes of Values and Social Responsibility. It offers students the opportunity to reflect upon their entire college experience. It challenges them to imagine ways in which their education can make them more fulfilled, productive and responsible. Students may not register for the Culminating Seminar until they have completed at least 90 credits.

Along with the Culminating Seminar, students select courses from the areas of Religious Studies and Philosophy. A variety of courses from these departments may fulfill these requirements. Students make their choices from among those offered each semester in each area and identified as fulfilling Ursuline Studies Program requirements.

Religious Studies and Philosophy courses are taken prior to or concurrently with the Culminating Seminar. Students must complete all requirements in the Ursuline Studies Program before graduation.

URSULINE STUDIES PROGRAM

DEVELOPMENTAL AND ACADEMIC GOALS	CONTENT AREAS	COURSES	CREDITS
STAGE ONE: FROM RECEIVED TO SUBJECTIVE KNOWING			
	INTRODUCTION to the LIBERAL ARTS	INTRODUCTORY SEMINAR	6
TO SOLVE PROBLEMS TO ANALYZE/SYNTHESIZE	SCIENCE	(CHEMISTRY, BIOLOGY, SCIENCE)	4
TO COMMUNICATE EFFECTIVELY	MATH	(MATH)	3
TO INTERACT SOCIALLY	SOCIETY	(SOCIOLOGY)	3
	SELF	(PSYCHOLOGY)	3
			19
STAGE TWO: FROM SUBJECTIVE TO PROCEDURAL KNOWING			
	CULTURE and the LIBERAL ARTS	INTRODUCTION to CULTURE	6
TO RESPOND TO BEAUTY			
	WORLD CULTURE		3
TO MAKE DECISIONS BASED ON VALUES	WESTERN CULTURE	(ART, DRAMA, FOREIGN LANGUAGE, HISTORY, LITERATURE, MUSIC, PHILOSOPHY, RELIGIOUS STUDIES)	3
TO TAKE RESPONSIBILITY FOR SOCIETY	AMERICAN CULTURE		3
	AESTHETIC RESPONSE		3
			18
STAGE THREE: FROM PROCEDURAL TO CONSTRUCTIVE KNOWING			
TO MAKE DECISIONS BASED ON VALUES	RELIGION	(RELIGIOUS STUDIES)	6
	PHILOSOPHY	(PHILOSOPHY)	3
TO TAKE RESPONSIBILITY FOR SOCIETY	COMMITMENT and the LIBERAL ARTS	CULMINATING SEMINAR	3
			12
		TOTAL	49

A MONOCULTURAL TEACHER FACES A MULTICULTURAL HUMANITIES CLASSROOM

Michael C. Carroll

Background

This paper is meant neither as a "We Are the World" nor as a "Stranger in a Strange Land" anthem. What it intends is to offer practical suggestions on how some modern American multicultural humanities materials may be coherently assembled and productively explored in a classroom marked by its ethnic diversity. (Virginia seems fertile ground for thinking about the humanities if the recent publication of papers from the Commonwealth Center for Literary and Cultural Change at the University of Virginia is any indication [see Cohen].) Further, the paper means to investigate how a white male college instructor (such as myself) might best select these works and learning experiences so that they reach and reflect a multicultural student population.

With groundhog regularity, each spring term for the past decade, I have taught a course called "Perspectives on 20th Century American Culture" to some twenty-five students as part of my teaching load with the Goodrich Scholarship Program in the College of Public Affairs and Community Service at the University of Nebraska at Omaha, an urban, commuter campus.

The program is nontraditional in its faculty, its student body (scholarship recipients), and its curriculum. The faculty is a mixed bag -- four Anglos, two Blacks, and a Chicano -- who in addition to delivering our own curriculum teach classes across campus for units as diverse as Black Studies, Criminal Justice, English, Philosophy, Social Work, and Women's Studies. The program recruits nontraditional students aggressively, providing full five-year scholarships to candidates who qualify on the criteria of financial need, residency, and a variety of factors forecasting success. As a result of our recruiting criteria and effort, the composition of the freshman class each year (about sixty-five to seventy students) is roughly forty percent Afro-American, forty percent

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Euro-American, and ten to fifteen percent Hispanic (predominantly Mexican-American), with a few Asian-Americans, and fewer Native Americans (mainly from Plains tribes). Older students, students with disabilities, students with children at home, and students with other atypical profiles may also receive special consideration with their application to the program.

Throughout the students' first four semesters at UNO, they take close to half their courses exclusively with other scholarship students in courses taught by program faculty. In all these courses, faculty try to cap enrollment at around twenty-five so that we can have more interactive sessions and assign and comment upon a good deal of student writing. Certainly, these conditions are present in the six-hour humanities course that scholarship students must take in their second semester.

Goals of the Humanities Course

Any curriculum design tends to be an exercise in subtraction, and surely this is the case when one is attempting to present a representative sampling of the cultural expression of five remarkably prolific American ethnic groups: Euro-American, Afro-American, Hispanic-American, Asian-American, and Native American (this sequence reflects each group's relative size in the American population).[3] I have been able to find only a partial solution to this problem, given the often unrecognized wealth of materials available. Accordingly, I find myself reminding the class often that the various works we study can be little more than a small though substantive sampling and that no one work or group of works can pretend to be fully representative of any ethnic group. This caveat helps to deter the type of criticism that was leveled at the novel and film The Color Purple a few years back. As more and more artists of color receive national and international recognition through various creative media, the fallacy of presuming that one situation or characterization stands for the entire group (as Mista in Alice Walker's novel was seen by some as a representative of the Black male) should be less in evidence.

Even acknowledging our limitations of scope, though, our class laid out some ambitious goals and expectations for the ninety-hour semester. We determined that we would read five novels and view five films, one each from the five ethnic groups we had identified. We proposed that we would study these and other related works from an aesthetic viewpoint (the formal considerations of how the works are put together) and from an ethical viewpoint (the affective considerations of how the works apply to human situations and problems). We 'deconstructed' these broader aims into six particular goals, determining that the course should help participants:

- to develop an awareness and appreciation for the elements, techniques, and themes of a variety of genres of ethnic literatures, i.e., to develop aesthetic standards,
- to establish a chronological sense of the cultural history of the United States in the 20th century
- to understand better the cultural experiences of modern ethnic America,
- to develop self-awareness about their own ethnic background(s) and experiences,
- to determine various ethnic writers, artists, and themes in ethnic literature that can be explored independently,
- to explore ways in which art may reflect life.

Over the years, my classes have found that such an ambitious list of aims can be approached only through the careful selection of materials and a collaborative learning format to guide both classroom and course progress.

Selection of Materials

With ninety hours of classroom time, I have figured that our class requires ten hours of course apparatus (i.e., introductions, evaluations, and just a bit of breathing room to create a lesson or two while the semester is ongoing). Blocking out these ten hours at the course's start, middle, and end leaves us with sixteen hours available for each of the five sections. This allows enough time in each section to read a novel, to view a feature-length, commercially produced film, to invite into the class a speaker or performer who is expert about and usually native to the culture under consideration. Also, we typically begin our discussion of the culture with a lecture/presentation that covers the culture's 20th century history along with relevant earlier background, recent demographic data, and assorted cultural artifacts, images, and icons. The 20th century historical approach provides a baseline that keeps the course from becoming too disjunctive and allows a vantage point from which to view such themes as the vanishing frontier, internal colonialism, self-identification, gender roles, and the like. The consistent pattern of assignment of each of these genres in each section still allows a few added hours to devote to other genres--e.g., music, drama, poetry, folklore, storytelling, dance, photography, other visual art.[6]

To accommodate these additional works, I compose and compile a packet of some one hundred pages of photocopied materials prior to each semester's offering. This handbook contains sections on each of the cultures we are studying, including some visuals, a chronology, a brief essay concerning the culture, usually a few poems or song lyrics, along with definitions and study or discussion questions for the novel and film. Students keep this material in a three-ring notebook so they can add and remove material when desired.

Thus far, I have assigned no core reader other than what I include in the handbook because few texts contain good brief primary documents from all five cultures without a lot of constricting apparatus and/or thematic versus chronological or cultural arrangement (as an example, see the otherwise appealing English composition reader Emerging Voices: A Cross-Cultural Reader by Madden-Simpson and Blake). Of recent publication, however, is a quality paperback edited by Diane Ravitch containing a good many important brief primary documents (the 1774 Appeal of the Slaves to the Royal Governor of Massachusetts, Chief Seattle's 1854 Oration, the lyrics of Woody Guthrie's "This Land is Your Land," or Ronald Reagan's Speech at Moscow State University) along with several well chosen photos and political cartoons of the day, all arranged by historical period. This text could, I believe, provide excellent background readings though contemporary creative work, visual material, and material on how to study genres of the humanities will still receive separate publication in handbook form.

Methods of Learning and Evaluation

Although my class does retain vestiges of traditional pedagogy and occasionally reverts to straight lecture and essay work, the class really is at its best as a collaborative learning community. The discussions are lively and sometimes provocative enough as to require the moderator role that I will sometimes assume. The mixed ethnic backgrounds of the students, of course, makes a resource that no one instructor, text, or tape could hope to represent. I have found myself both much enlightened and deeply moved as a facilitator for classroom discussion of the works and themes, and I know the students themselves grow not only in the knowledge of other cultures but in appreciation of their own roots as well.

One assignment that is central to this collaborative learning effort is the two-way journal that students maintain and submit at the end of each section. In this confidential writing, which I respond to at some length, the students feel free to explore thoughts and feelings that they may be unwilling to broach in class. It is both fascinating and rewarding to read an entry by a young Bohemian-American woman exploring her attitudes toward Afro-American history or toward the sometimes heated classroom expression of students other than herself or correspondingly to read the strong identification of students of color with artists and characters who populate the field of ethnic humanities. I will regularly select such relevant journal entries and use them as prompts for writing or discussion, in some cases anonymously reading a passage and role playing the part of the entry writer with the class. Regardless of the entries' use, though, as the primary reader of the entries, I have the opportunity "to learn [my] way into student cultures" (Dean) as well as drawing upon the journal for classroom use.

A final assignment that encourages students to learn from one another's experience is the creative project that each student is encouraged to complete as a term effort. Projects may be either creative or critical, and they tend to take a wide variety of forms: paintings, murals, photography, video, architectural scale mock-ups, craftwork, dance, music, creative writing, or multi-media. Periodic progress updates create anticipation among class members and tend to produce imaginative and often powerful work.

All these assignments are designed to encourage in students a sense of empowerment (Cummins). If the class succeeds as an empowered learning community, students will be eager to learn from one another and to contribute once they recognize that their culturally significant experiences connect to and enlarge upon the course's content.

Much of the above discussion offers a blueprint for course assembly and implementation. Of a more challenging and energizing nature, though, may be the issue of cultural sensitivity. Our classrooms are becoming increasingly pluralistic but without particularly encouraging data concerning the retention of students of color. Part of the difficulty, of course, may be the unfamiliarity the minority student has with the cultural cues of a mainstream campus setting. This uncertainty can persist in the classroom, especially when the student enters and finds, predictably enough, an Anglo instructor. When he or she then hears that the instructor will be presenting material of the student's home culture, the student may question the teacher's credibility or resent the appropriation of cultural materials that belong to the student's own experience (cf. "Whose Voice Is It, Anyway?). The problem, of course, is only compounded when the mainstream teacher faces the daunting task of representing the cultural heritage not just of one minority group but of several. At the same time, the facilitator will need to convince some students that understanding events from more than just a Eurocentric vantage point is not only possible but interesting and enriching. Despite these challenges, this ability to attempt different cultural perspectives probably qualifies as the greatest reward for all participants.

The developmental pedagogy and collaborative learning approach has created a classroom atmosphere where students seem willing to change and to expand their understanding of multicultural literacy. A clear majority of my students become eager to interact imaginatively with the characters in the works, with their peers in the classroom, and with me through the journal exchanges. Both professionally and personally, I have found that despite the regularity of the offering, the class has continued to produce new insights. As long as I continue to pursue this material with curiosity, honesty, and humility, I continue to find that first-year students have much to teach their teachers as well as themselves, especially in the pluralistic classroom.

Endnotes

1. Actually the number of ethnic categories becomes far more numerous and complicated when one subdivides, for example, the Euro-American experience into Italian-, Irish-, or Jewish-American, or when the differences among Americans of Mexican, Puerto-Rican, or Cuban descent are reflected in the arts and culture of those respective groups.

2. For any new teacher interested in developing an ethnic studies course, Teaching Strategies for Ethnic Studies by James A. Banks should prove very helpful. Banks discusses curriculum planning and evaluation, provides fine chronologies and historical and demographic information and analysis, and offers appendices of nicely annotated entries for selected videotapes, films, and filmstrips on American ethnic groups. He also includes a short list of "Twenty Classic and Landmark Books in Ethnic Literature." It's impossible to compose a list that does not leave off someone's favorite work, and although Banks' attempt might be updated and have a few works by women added (e.g., Zora Neale Hurston's Their Eyes Were Watching God (1937) or Leslie Silko's Ceremony (1977) or Toni Morrison's Beloved (1987), his list is solid and includes a number of classics that students typically appreciate: Ralph Ellison's Invisible Man (1952), N. Scott Momaday's House Made of Dawn (1966), Rudolfo Anaya's Bless Me, Ultima (1972), and John Okada's No-No Boy (1976) among them.

For relevant critical writing on minority literature and aesthetics, interested scholars should find helpful surveys by Gates and by Simonson and Walker. The second volume contains a counterlist that is offered as a supplement to the well known list of E.D. Hirsch, Jr., in Cultural Literacy.

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NEW CLIENTELES AND NEW ALLIANCES FOR UNIVERSITIES THROUGH NONTRADITIONAL EDUCATION

Oscar L. Dorsey
Michael J. Pierson
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Introduction

Higher education has arrived at a point in time when decisions must be made. We have students in our classes, now, who are not familiar with classic literature, who have not read Shakespeare, or the Iliad, and whose only common link with the scholars are minutes of the Keating Five ethics hearings. Even the Bible literature no longer binds generations. Seventeen percent of our classes cannot name the writers of the four Gospels or who wrote the Ten Commandments. The Bible belt has become the sun belt. Although the students, like the professors, have become accustomed to change and the multiplicity of decisions brought by this, few acknowledge that it is the rate of change which is bringing dilemma. We live in an age where it is cheaper to store knowledge than to destroy it, and the amount of knowledge is expanding at a tremendous rate. Higher education must answer some questions before making a decision. Questions like:

1. Where have we been?
2. What are the tasks and purposes of higher education?
3. What questions are we to answer?
4. What trends do we see?
5. Who are our new clienteles and alliances?
6. What are our priorities for the future?
7. What are the challenges for the future?

We propose to discuss these questions as a framework to develop understanding about a nontraditional direction which we must move towards to keep education vital and purposeful.

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Where Have We Been?

We have revived, through nontraditional education, a very old concept: the concept of a learning society. What we now term "lifelong learning", the Greeks spoke of as *Paedeia*. It was where society and culture were conceived as an environment for the lifelong growth of the total individual. The Greeks visualized an educational plan which was to be effective in changing people's lives and directing them to life's highest purposes. It was a stirring vision of a society whose citizens would have continual opportunities to expand their minds, enrich their spirits, provide for their personal creeds, and contribute to the common good. We, as a society today, are moving in this direction and adapting this process.

As western civilization evolved, education formed other alliances in order to promulgate itself, to institutionalize itself, or to protect its very survival. We found the alliance with the nobility where the governing class became patrons of the scholar and provided the subsistence of artists and scholars. In return, writers, scientists, and artists provided both creative discoveries and accomplishments, as well as tutorial services to the aristocratic offspring. When the nobility happened to be the king, the alliance then became a close association with the state; it is here that the state came to exert tremendous influence on the content and direction of education.

The most profound alliance, however, was with the church. From a need of the ecclesiastical authority to assert and propagate itself, there developed a legalism and authority which demanded rigorous training for prospective clergy. Out of this context of asceticism came the style and ritual of an educational process which clearly stifled the development of the academy by harnessing it to the self serving needs of a monolithic church. In fact, until the academy broke from ecclesiastical control, academic freedom was simply an ideal.

With the coming of the Industrial Revolution, higher education allied itself to the economic institution, again undergoing massive changes. The alliance was broader and opened new pathways for participation. The most notable was to move from the realm of pure theory into the region of application, by testing ideas through applied research rather than by logic alone. The alliance was productive for society and led to further institutionalizing of education. But, it was in America that the more modern alliances were to develop. The Land Grant Act represented an alliance with the people to provide leadership and distribution of useful knowledge. This alliance also provided freedom for the developing liberal arts institution to maintain its contribution, and led to the alliance with the American dream of education for all. Thus, our old clienteles, the state, the church, the industrial movements, the aristocrats, and finally the people themselves, established fertile fields for growth and development, and brought higher education into recent times.

What Are The Tasks And Purposes Of Higher Education?

Higher education has tasks and purposes always affected by the environment in which it finds itself, and the tasks and purposes have not remained constant in the developmental process. Some would argue that there are some goals which are immutable and independent of time such as cultivation of the intellect, discipline of the mind, command over the powers of the human mind, learning how to learn, knowing what we know and what we do not know, and the search for truth and virtue. But it seems that each new age brings its own tormenting questions and requires that we move the tasks and purposes of education from the philosophical summary domain into the practical dimension of human existence. In modern times, the university is expected to lead society, although some would argue it should only provide a mirror for society to view itself. Without a doubt, a major function is to train the future leaders in all aspects of human endeavors, and to address defined problems in hope of solutions. Recently, tasks of education appear to be developed from defined needs and change as needs arise. If this is true, higher education certainly has a future because needs are increasing rapidly.

What Questions Are We To Answer?

As higher education developed, certain questions had to be answered by educational leaders in order to set direction at that time and place. Many of these questions must be answered by each generation, and how they are answered describes the educational system of the time. We still struggle with the question of whether to educate for the benefit of the state or the individual, although the conflict is neither mutually supportive or antagonistic. The answer to this question has varied by government policy in the historical setting and bent the course of society. Each society has had to determine who is to be educated, the elite or the masses. We are familiar with the movement in the last two centuries of first educating only the aristocrats, then the meritocrats, and finally the concept of educating the masses. We also contend with the question of whether education shall preserve traditions or meet needs or can it do both at the same time. We must determine whether the delivery system shall be individualized or mass produced. Who shall be responsible for payment, society or the individual? Shall the curriculum be set by the state or by the participant? Shall emphasis be placed on cognitive material, that is, facts and knowledge, or on affective material, where humanity learns about how they feel? Shall we emphasize the practical or theoretical or attempt both? These and other questions and their solution at the time largely determine what education becomes.

What Trends Do We See?

Today we see many trends which have great significance for higher education. We have adopted the egalitarian stance of education for all, seeking the virtue of an equal start and equal finish for all. The concept of intermittent and reoccurring education over the life of the individual appears to be a fact which is widely accepted. Different delivery systems are being investigated whereby the green grass campus is aided by the community at large, and the instructor uses society as the laboratory. Government today, uses its agencies, policies, and money to obtain its will. One must wonder if the academy is indeed alive, if it can free itself from business and government entanglement as it once freed itself from ecclesiastical authority. Numerous new activities are characteristic. Rising expectations from the general public are seen and new educational terms are added to the vocabulary. Names for new activities or concepts like experiential learning, external degree, nontraditional study, open learning, open university, sandwich learning, andragogy, university without walls, learning exchange, advocacy, contract learning, functional learning, and so on have become part of our vocabulary. The volume of terms alone is related to rising expectations from the university by the masses.

If one attends national conferences, one of the major topics of the agenda is quality of education. Much laborious discussion is exerted as to who is responsible for quality control in new programs. Many have interest in this, and it is asked, who shall control academic quality: the accrediting association? the institutions? the faculty? the government? or the client? The major problem of a learning society is the struggle who determines quality. Undoubtedly, a credential oriented society is going to seek expansion of the credential. One trend that is definitely visible is the shift from judging educational delivery by structure and process to outcome and achievement of students. Accrediting associations no longer only look at facilities, libraries, carnegie units, and faculty credentials. They are beginning to measure outcome against stated objectives to force another type of responsibility on the university. This in turn is forcing a new look at stating goals and how outcomes are to be defined and measured. Higher education is taking an almost masochistic stance in its self-evaluation and the trend is to become more defensive as activities are studied in microscopic detail.

Who Are Our New Clienteles And Alliances?

With astonishing suddenness we have become aware of new alliances with government and business, and we are cautiously testing the relationships. Federal money is appreciated, but the role as society reformer has left us in a quagmire of bureaucratic paper work, and the government is a rigorous taskmaster. But regardless of entanglement, the alliance is becoming closer knit and the dictatorship of the dollar in choosing direction for us in research, curriculum, and student audiences is more obvious. The government determined role of the university as a social instrument is increasing and will continue for the foreseeable future. Business has always felt they could do the job of education much better than what is being done and as the alliance with this segment of society develops closer bonds, there will be a testing of the wills over process and outcomes of the educational endeavors. These alliances hold much promise and much threat and will hopefully result in a workable compromise and not end up in roles of taskmaster and slave.

Another new alliance is the adult population at large and it is from these that our new clientele merges. At least forty million adults are in career transitions which require the educational services of higher education. Inside the career transitions are the previously disenfranchised groups of minorities, the early retirees, the senior citizens, the dropouts, the working women, the professional military, the handicapped, and others. Vocational, cultural, and leisure needs of these groups will increase dramatically after 1990 when the average age of the American population significantly increases. At the present time, seventeen million citizens about the age of 25 are already using the services of higher education in some form. The new clientele use the benefits of the university in a different manner as compared to the traditional student, but they do not demand a lesser quality nor a vastly different curriculum. While they want more individualization of program and election, they do not require that the university relinquish its prescriptive role as expert, neither do they wish educational activities of reduced rigor. They do require consideration in where the educational activity takes place and how the opportunities are presented. It is a mistake for universities to view the demands of the new clienteles as a tyranny of the majority and instead look to the challenge of meeting demands. When the history of higher education in our time is written, one of the major ironies that may be described is that we spent so much time discussing "declining demand" at the very moment that opportunity existed for another great expansion in educational services of higher education.

What Are Our Priorities For The Future?

To take advantage of the opportunities offered by the new clientele, higher education has some priorities to establish. The first of these is more effective coordination of resources: public, private and those of the individual client. It is not apparent in increasing inflation and a tax reducing mood that fiscal resources will increase significantly. Therefore, better use of existing resources must be made. The management function and the distribution function have not been fully exploited to get the most from dollars already available. As a second step, there must be more collaboration between and among all classes of users of the services of higher education. Business and the individual client must be willing to assume their fair share of the cost of providing program change. This is particularly true in the case of post-baccalaureate study and research oriented activities. Another priority is to build better linkages between learners and learning opportunities. The community-at-large must be fully utilized without reducing the resources which support the central campus. New delivery systems must be developed to support such linkages. A fourth priority is in faculty development. The rapid changes and the demands placed on the faculty insist that the faculty have more renewal time and inservice training. In addition, the reward system must be made commensurate with the services performed and the value to society as a whole. Finally, new definition of mission, role, and forms of institutional organization must be agreed upon in order that the emerging developments are those which do what is expected, and the proper commitment can be made for further development. Robert Maynard Hutchins once said that a university was several departments connected only by a common heating problem. Hopefully, new challenges will give a sense of unity and purpose and have us organize to serve.

If these priorities are accepted and met, and we can discern accurately what is happening to higher education today, then we will be able to determine what should happen, and project so that we can build bridges from that which we have done well in the past to that which is needed in the future.

What Are The Challenges For The Future?

According to Morton Darrow, former Vice President for Planning and Analysis, Prudential Life Insurance Company, there are ten major long term challenges for higher education in the decade of the nineties. These are:

1. Coping with continued governmental pressures to extend its authority over educational activities.

2. Creating self-renewal mechanisms and techniques in institutions of higher learning to encourage adaptability to major social changes.

3. Creating new technologies and expanding job opportunities for both faculty and student bodies.

4. Organizing, directing, and motivating higher education institutions to adjust to:

   a. The expansion of knowledge
   b. The erosion of authority
   c. Educational needs of the working adult

5. Meeting the public demands for broadened goals for educational institutions without rendering the enterprise ineffectual in its learning and teaching functions and its survivability.

6. Developing long range educational plans and operating in the face of uncertainties regarding: inflation or deflation, finance, societal needs, and governmental policies.

7. Anticipating and coping with increased pressures for accountability from governmental and voluntary organizations.

8. Filling the expanding societal demands for better quality graduates and more responsible citizens.

9. Coping with the vulnerability of educational institutions to coercion and disruption arising from: deterioration of urban centers, spread of violence and terror, breakdown of trust and honesty, revival of sixties' militancy, and war.

10. Coping with establishing and maintaining a set of values and ethics appropriate for progress and the common good of society.

These challenges are formidable but not unique. It is our opinion that higher education will make the right decisions and make the right alliances to serve the new emerging clienteles. Higher education has the wisdom to earn and keep people's confidence in our institutions and society. We believe that this wisdom will be used in an adequate manner to service traditional and nontraditional clients.

CHANGING OUR INSTITUTIONS TO MEET THE NEEDS OF SPECIAL CONSTITUENCIES: COMPUTER TRAINING THROUGH PARTNERSHIPS

Roberto Duncan

Introduction

During the past twenty years, there has been increased attention to the issues and concerns of individuals with disabilities. Individuals with disabilities include those who are visually impaired, hearing impaired, orthopedically impaired, language impaired and traumatic brain injured. Colleges and universities, as well as society at large, have been slow in changing to facilitate assimilation of individuals with disabilities on the campuses and, to develop programs to prepare them for careers. The Individuals with Disabilities in Education Act of 1990 and The Americans with Disability Act of 1990 represent commitments by the Federal Government to improve working conditions and educational opportunities for Americans with disabilities. The primary purposes of these laws are to effect changes to make transition from school to employment easier and to remove obstacles in the workplace that inhibit hiring and retaining employees with disabilities. Colleges and universities must change to comply with both the letter and spirit of these laws.

Several programs have been created to train individuals with disabilities to become professional and productive employees. The private sector and state departments of vocational rehabilitation have frequently formed partnerships to develop training and employment programs. They have taken initiative to respond to the needs of individuals with disabilities. While it is possible to find examples of such initiatives in higher education (James Burns and others 1990), they are relatively few (Straughn 1988). Divisions of continuing education, career programs and community services have the flexibility to develop career preparation programs. They can provide leadership to the academic community by forming partnerships with governmental agencies and the private sector.

The Division of Career Programs, Continuing Education and Community Services at Catonsville Community College has entered a partnership with The Maryland Rehabilitation Center, The IBM Corporation and an Industrial Advisory Board to provide training in computer programming and microcomputer software applications to individuals with disabilities. This paper will summarize the partnership in terms of the roles of the partners, student recruitment, curriculum and internship.

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Roles of the Partners

The Maryland Rehabilitation Center (MRC)

The Maryland Rehabilitation Center is a part of the Maryland Division of Vocational Rehabilitation. The center provides comprehensive services to individuals with disabilities and consist of fourteen training programs, a special unit for the blind and visually impaired, a driver's education program, a recreational facility, a rehabilitation nursing unit and a dormitory. It was designed to provide training, counseling and guidance, physical and mental restoration services, job placement and follow-up, maintenance and transportation services in a residential setting.

The MRC is responsible for:

1. program funding
2. program monitoring and evaluation
3. selection of training organization
4. recruitment and selection of students
5. student support services
6. instructional materials
7. physical facilities

The IBM Corporation (IBM)

The IBM Corporation developed two model programs for training severely disabled individuals in personal computer skills and, computer programming. The programs were created in 1972 and have been duplicated in 48 sites across 25 states. Seven colleges and universities participate in the programs. The programs have placed 2,587 of 3,069 graduates in programming positions over the past 29 years (IBM 1990). IBM has been associated with the MRC project since 1976 and provides computer hardware, computer software, and technical advisors.

IBM equipped the computer lab with an IBM Token Ring Network with nineteen stations using Model 25 machines and Model 75 server. The software includes COBOL, FORTRAN, Assembly Language, word processing and braille capabilities. The lab is also equipped with technology devices such as enlarged keyboards, sensitive touch keypads, VISTA for screen enlargement and ARCTIC voice synthesizers. This lab is hooked-up with the campus mainframe computer twenty miles away.

The Industrial Advisory Board (IAB)

This board is comprised of employers in the Baltimore metropolitan area. The board meets quarterly and provides:

1. advice on knowledge and skills required in the workplace
2. assessment of programming competencies of students
3. opportunities for internship and jobs
4. volunteers for tutoring, guest lecturing, field trips

Catonsville Community College at the Maryland Rehabilitation Center

The College administers the contract through the Division of Career Programs, Continuing Education and Community Services. The Division of Technical Studies supervises curriculum and instructional matters. College responsibilities include:

1. instruction and curriculum development
2. student advisement and assessment
3. job placement and internship

The partners are supportive of the goals of the program. Occasionally, between meetings of the partners, issues arise that require prompt resolution. For example, changes in the job market allowed employers to be more selective when hiring computer programmers. The requirements for entry level jobs were increased to demand a baccalaureate degree and two years of experience. Changes such as this one placed our students at a disadvantaged when competing for positions. Effective communications between The Maryland Rehabilitation Center and Catonsville Community College facilitated curriculum adjustments in a period shorter than is usual for traditional academic review. This is viewed as one of the key elements contributing to success of the project.

Student Recruitment

Individuals with disabilities who are interested in participating in the computer informations systems program must be interviewed and evaluated by the Department of Vocational Rehabilitation (DVR). This process begins with a student's visit to a field counselor in one of over 30 DVR offices throughout Maryland. The evaluation process consist of the following steps:

1. Interview with counselor and referral to MRC
2. Medical evaluation
3. Formulation of individualized written rehabilitation program.
4. Evaluation of physical and mental skills
5. Administration of Computer Programmers Aptitude Battery
6. Evaluation of reading skills
7. Evaluation of mathematical skills
8. Fitting of assistive technology devices by Technical Resources Office of MRC

Student recruitment is an on-going process. It takes a year to recruit a class of thirty. The disabilities in the current class include totally blind, partially blind, hearing impaired, paraplegics, amputees, quadraplegics, traumatic brain injury, recovering alcohol and substance abuse. Ages range from 18-50 and most have been away from school for at least five years. One student has a B.A. degree and another earned an A.A. degree. The others have completed high school.

Curriculum

The project prepares students with disabilities for entry level positions as computer programmers (mainframe emphasis) or microcomputer software applications specialists. Students in the computer information systems option earn a Catonsville certificate while those in the microcomputer software option are awarded a certificate from the Maryland Rehabilitation Center. This is a 12-month curriculum. The instructional program begins with 4 weeks of basic skills. They include review English and Mathematics and Achieving Academic Success to develop study skills. Classes meet from 8:30 a.m. to 4p.m., Monday through Friday.

The computer information systems curriculum consists of the following:

Courses	Credits	Class dates
Introduction to Computers and Computing	3	July 9-Aug. 27
Fundamentals of Computer Programming Using FORTRAN	4	
COBOL Programming I	4	Sept.4-Oct.22
Application Development Using Microcomputers	3	
Assembly Language Programming	4	Oct. 29-Dec.22
COBOL Programming II	4	
Systems Analysis and Design	3	Jan.7-Feb.25
COBOL/CICS/VSAM	4	
Data Base Management Systems	3	Mar.4-Apr.22
C Language Programming	4	
JCL and Utilities	3	
Cooperative Education and Off-Campus Work Experience	3	May 1-Jun.30
Industrial Advisory Board Examinations		Nov. & April

All courses utilize the textbooks required by the computer information systems department. Visually impaired students are provided with books on tape and readers. Should a book not be available on tape it is recorded by MRC volunteers.

Class schedules differ significantly from that of on-campus students enrolled in the same curriculum. Students enroll for two or three courses at a time. They average 30 hours a week of lecture and labs. This schedule exceeds the requirements for three and four hour credit courses. The daily schedule is flexible to compensate for some of the disabilities and to ensure that students attain the level of competency necessary to succeed as professional programmers.

The IAB examinations are in addition to the evaluations required by the academic department. Volunteer programmers design and evaluate the examinations based on the knowledge and skills taught. The examiners interview the students after the examinations to determine the logic used to solve the problems. These examinations allow the partners to determine when a student is ready for internship and employment with a company. Students must receive certification by the IAB in order to be placed with an employer.

Microcomputer software applications option

Courses	Credits	Class Dates (1990-1991)
Introduction to Computers and Computing	3	Jul.9-Aug.27
Fundamentals of Computer Programming Using FORTRAN	4	
Advanced Spreadsheets	3	Sep.4-Oct.22
Applications Development Using Microcomputers	3	
Microcomputer Operating Systems	3	Oct.29-Dec.17
Business Graphics	3	
Systems Analysis & Design	3	Jan.7-Feb.25
Introduction to Computer Operations	3	
Cooperative Education and Off-Campus Work Experience	3	Mar.4-Apr.22

The microcomputer software applications option was designed during the second year of Catonsville Community College's joining the partnership. It was created to increase student retention by preparing students for alternative careers in the computer field. Students may choose this option after completing the FORTRAN and COBOL I courses and the November competency examination of the Industrial Advisory Board. Evaluations of achievement and interest in programming are used to guide the student and his support staff of nurse, psychologist, physician, case worker and field counselor in modifying the student's individualized written rehabilitation plan. This program option has contributed to the reduction of the drop-out rate from fifty-percent in 1989-1990 to under thirty-percent in 1990-1991.

Internship

The primary goal of the program is to train students to secure and retain jobs. The cooperative education or internship experience is an important step to prepare students for the professional work environments of computer programmers and specialists. Catonsville Community College seek opportunities for students to acquire experience on IBM PC's and compatibles, VAX 11/780 and IBM 4381, IBM AS400. Experience with these environments prepare our students to compete with graduates with baccalaureate degrees and often is an entry to a permanent job. The MRC evaluates the College on its ability to assist the students to secure and retain a job for at least 90 days.

The job placement specialist is responsible for preparing students for cooperative education experiences and a job search. The placement specialist is also responsible for marketing the program. The specialist takes the students to job and career fairs, organizes guest lectures with business and industry officials, instructs and guides students in preparing job applications and resumes, and conducts mock job interviews. These activities lead to opportunities for students to meet with professional programmers, to visit companies, to participate in interview with employers, and to see programmers with disabilities at work.

Employers have been committed to the program. Successful marketing of the program usually involves satisfactory answers to five main concerns of employers:

1. Do employers have to pay students?
2. Are students covered by college insurance?
3. Will the students need special equipment and facilities?
4. What are employer's liabilities in case of accident?
5. What computer languages or systems do students know?

Employers are receptive when they know that students are not paid during an internship. However, they are encouraged to consider students for permanent positions. College insurance protects the student while on the job except for areas where workers compensation is mandated by the State.

Achievements

Catonsville Community College has been able to place 100% of the 1989-1990 graduates in permanent positions. The average pay for these computer programmers is approximately $16,000 a year. One year after completing the training, all of the graduates passed national certification examinations as Associate Computer Professionals.

Providing equal educational and job opportunities for the disabled has been codified in law for the past eighteen years. The results of the laws and associated programs have been disappointing. The increase in the number of students with disabilities attending postsecondary institutions (Capitol Publications 1990) and the enactment of the American with Disabilities Act and The Individuals with Disabilities in Education Act makes this a good time for institutions of higher education to seize the initiative and modify administrative and academic practices to improve programs and services for individuals with disabilities. Partnerships with external agencies should be explored to maximize the human and financial resources to ensure a higher level of career development programs for students with disabilities.

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VALUES, GENDER AND EDUCATION:
AN EMPIRICAL STUDY OF MIDWAY COLLEGE

Christopher J. Frost
Michael J. Pierson
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Introduction

Describing and understanding the value system of Americans has been of importance to social scientists for decades. The intensity of the discussion has increased as of late, however, for reasons that range from such intellectual currents as Bellah and colleagues' thought-provoking work, Habits of the Heart, to such social currents as war in the Middle East.

Although the discussion of values has been provocative, (see also Lewis, 1990, and Josephson, 1990), there are at least three major limitations to many of the studies. First there is the problem of sample bias. The samples were drawn from the more educated strata of the population, primarily because of the complexity of the values instrument. To account for this sample bias Milton Rokeach devised a simpler means to study values from a larger cross section of society.

A second limitation has been the breadth of generalizations made from limited samples, especially where those generalizations are not grounded in contextual variables (like ethnicity, class, coeducation, religion, and gender). For Bellah and colleagues to debate the broad issues of individualism versus commitment (community), without recognizing and addressing fully the importance of gender, for instance, is to misstate the case.

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A third limitation has been the failure to understand that just as there are a variety of philosophies of life that may be considered "individualistic," there are also a variety of institutions in which an individual may choose to participate. The most "appropriate" level of commitment to the collective may vary by institution (educational versus religious versus political, etc.), and it may vary by developmental age (adolescence versus early adulthood versus late adulthood, etc.).

Consequently, we argue that the issue of values in general, and public versus private value profiles in particular, demands a contextual approach, that is, an approach that specifies which individuals involved in which institution at what time of the lifespan.

The Problem

This paper reports results of an empirical study conducted at Midway College (Note 1), one that involved administering the Rokeach Values Survey. The Midway College profile (all female) is examined in contrast to specific American profiles that Rokeach uncovered using the same instrument. The results of the comparison are plotted along a continuum that ranges from "individualistic concern" to "social commitment."

The Value Inventory was administered to a random sample of Midway College students in order to assess whether the women of Midway reflect or deviate from the national profile. Because the sample consists of females only, the unique nature of Midway as a "women's college" can be compared to national rankings by gender (Rokeach, 1973)--especially because American society is generally considered biased toward "masculine" values.

Rokeach's Approach to Values

Milton Rokeach defines a value as "an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferred to an opposite or con-verse mode of conduct or end-state of existence...A value system is an enduring organization of beliefs concerning preferable modes of conduct or end-states of existence along a continuum of relative importance" (1973, p.5). To say that persons possess a value is to say that, cognitively, they know the correct way to behave or the correct end-state toward which to strive. Rokeach terms beliefs that represent "desirable modes of conduct" **instrumental** values, while those that represent "end-states of existence" are designated **terminal** values (Rokeach, 1973).

A terminal value can be self-centered or society-centered; thus, a person's attitude and behavior represents whether or not their personal values or their social values have priority: "It is interesting to note that an increase in one social value will lead to the increase in other social values and decreases in personal values; conversely, an increase in a personal value will lead to an increase in other personal values and a decrease in social values" (Rokeach, 1973, p.8).

Instrumental values are concerned with morality and competence. Violations in this domain lead to "feelings of quilt about wrong doings and the feeling of shame about personal inadequacy" (Rokeach, 1973, p.9). The more widely shared a value is, the greater is the social pressure to adopt the value.

Rokeach contends that such variables as gender, culture, intellectual ability, political and religious affiliations, and socioeconomic status will generate differences in individual value systems. As stated above, we have chosen to focus on the education-values-gender nexus. In a previous study, Feather (1975) reported that very few differences occurred in value rankings of students attending coeducational schools and students attending same gender schools. Furthermore, Feather's study indicates that there was a discrepancy between the way students ranked their own values and the values attributed to their schools. This study will also put Feather's generalizations to an empirical test.

Value Profiles: Rokeach's American Sample

Tables 1 and 2 illustrate respectively the terminal and instrumental value rankings by gender (American sample). It is a reasonable expectation to find value profile differences by gender, because the socialization process in the United States tends to be gender-specific. With men, for example, such values as career achievement, the use of logic, and a sense of autonomy are generally stressed (a value profile that is decidedly "individualistic"). Women, on the other hand, are generally encouraged to place a higher value on the family, the use of emotion, and affiliation. By administering his Value Inventory, Rokeach (1973) puts these commonly held generalizations to the test.

According to Rokeach, there are a number of values that do not seem to be gender-specific. In the rankings of terminal values, for example, both males and females placed a world at peace, family security and freedom at or near the top, while an exciting life, pleasure, social recognition, and a world of beauty clustered at the bottom. The most highly rated instrumental values for both genders were honest, ambitious and responsible, while the least preferred values were imaginative, obedient, intellectual and logical.

The value rankings revealed gender differences as well, however. The largest difference in terminal rankings was found for a comfortable life; it was ranked thirteenth by women and fourth by men. Men also ranked a sense of accomplishment higher than their female counterparts, but they did not indicate much of a need for salvation. (Evidently success in this world has some bearing on a perceived need for success in an afterlife!)

TABLE 1

Composite Rank Orders* of Terminal Values by Gender: American Sample

Value	Value Orientation	Rank by Men	Rank by Women	Net Differ
Comfortable	Self	4	13	-9
Exciting life	Self	18	18	0
Accomplishment	Self	7	10	-3
World at peace	World	1	1	0
World of beauty	World	15	15	0
Equality	Nation	9	8	+1
Family security	Family	2	2	0
Freedom	Self	3	3	0
Happiness	Self	5	5	0
Inner harmony	Self	13	12	+1
Mature love	Family	14	14	0
National security	Nation	10	11	+1
Pleasure	Self	17	16	+1
Salvation	Self	12	4	+8
Self-respect	Self	6	6	0
Social recognition	Self	16	17	-1
True friendship	Family	11	9	+2
Wisdom	Self	8	7	+1

*Figures shown are rank orders obtained from median rankings (n = 665 males; 744 females).

Some differences also emerged in terms of how one ought to behave in reaching one's desired end-states. Females rated the instrumental values (see Table 2) loving and forgiving higher than their male counterparts, while males preferred being independent, competent and ambitious more than the females did.

TABLE 2

Composite Rank Orders* of Instrumental Values by Gender:
American Sample

Value	Rank by Men	Rank by Women	Net Differ
Ambitious	2	4	-2
Broadminded	4	5	-1
Capable	8	12	-4
Cheerful	12	10	+2
Clean	9	8	+1
Courageous	5	6	-1
Forgiving	6	2	+4
Helpful	7	7	0
Honest	1	1	0
Imaginative	18	18	0
Independent	11	14	-3
Intellectual	15	16	-1
Logical	16	17	-1
Loving	14	9	+5
Obedient	17	15	+2
Polite	13	13	0
Responsible	3	3	0
Self-controlled	10	11	-1

*Figures shown are rank orders obtained from median rankings (n = 665 males; 744 females).

In generalizing from his findings (rankings as well as actually median scores obtained for each value), Rokeach arrived at the following conclusion: "These differences seem to be consistent with much that is intuitively known about the differences in the ways men and women are socialized in Western societies" (Rokeach, 1973, p. 60). Generally speaking, men are more materialistic, achievement and intellectually oriented, while women are more concerned with religious salvation, love and freedom from conflict.

Value Profiles: The Midway Sample

Table 3 illustrates the instrumental and terminal value rankings reported by the Midway sample. Comparing Rokeach's female respondents to that of our own survey (Note 2), we find the following: 16 out of the 18 instrumental values and 18 out of the 18 terminal values are ranked differently.

TABLE 3

Composite Rank Orders* of Terminal Values and Instrumental Values: Midway Sample

Terminal Value	Value Orientation	Rank	Instrumental Value	Rank
Self-respect	Self	1	Honest	1
Freedom	Self	2	Responsible	2
Happiness	Self	3	Loving	3
True friendship	Family	4	Forgiving	4
Family security	Family	5	Broadminded	5
Equality	Nation	6	Courageous	6
Inner harmony	Self	7	Independent	7
World at peace	World	8	Helpful	8
Salvation	Self	9	Ambitious	9
Mature love	Family	10	Capable	10
Accomplishment	Self	11	Cheerful	11
Wisdom	Self	12	Intellect	12
Pleasure	Self	13	Logical	13
Exciting life	Self	14	Imaginative	14
National security	Nation	15	Polite	15
Comfortable life	Self	16	Clean	16
World of beauty	World	17	Obedient	17
Recognition	Self	18	Self control	18

*Figures shown are rank orders obtained from mean rankings (n = 61, all females).

As illustrated in Table 1, Americans as a whole ranked a world at peace first, family security second, and freedom third. By graphing these values along a continuum that ranges from a "collective" orientation to an "individualistic" one (see Figure 1), the trend is unmistakable: Americans begin at the broadest end of the collective (the world), then value a more circumscribed community (the family), and then value their own self (freedom). These data alone suggest that the incessant cries against "rampant individualism" may not be on target.

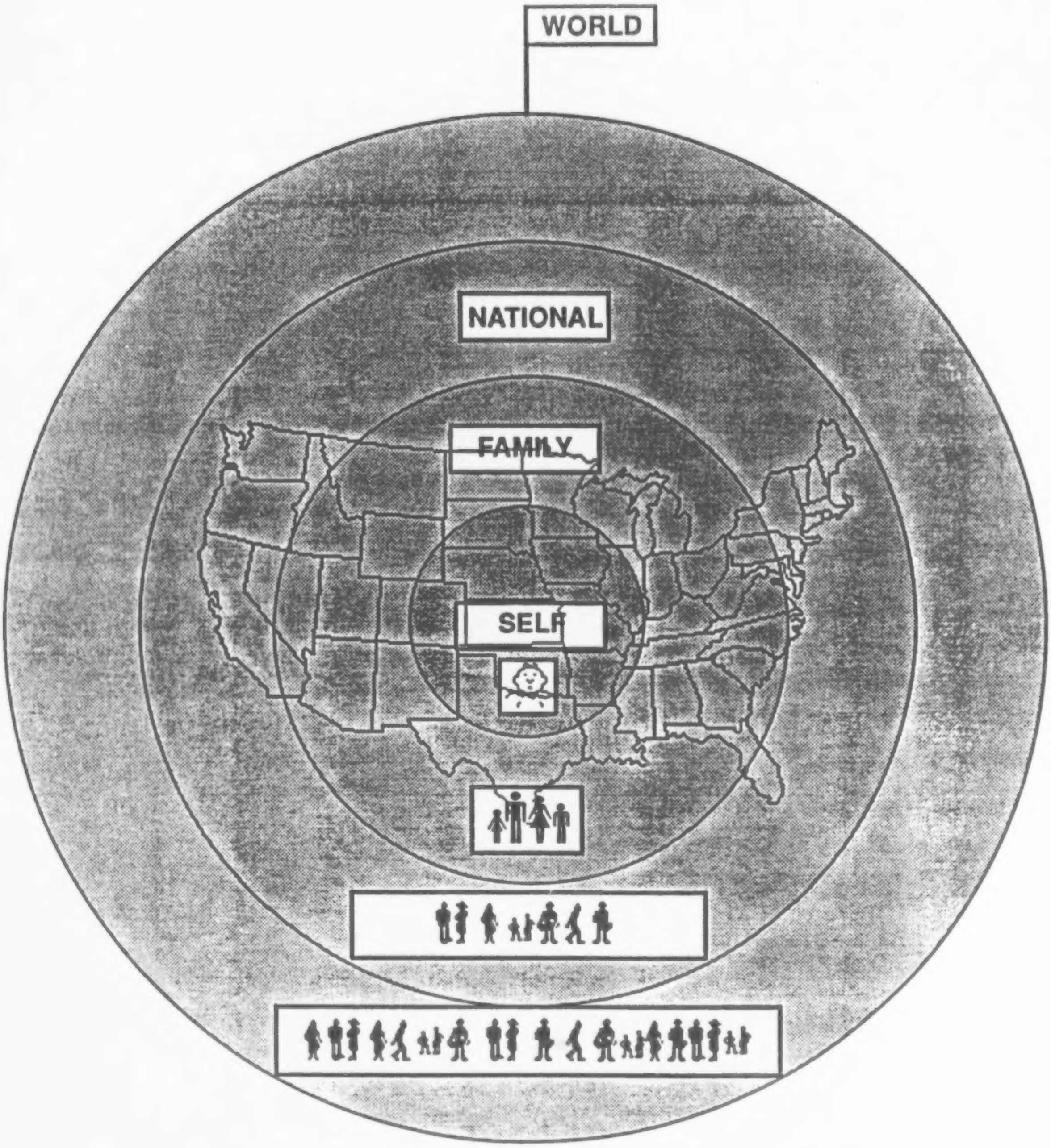
WORLD
NATIONAL
FAMILY
SELF

FIGURE 1.

Values Orientation: From Individualistic to Collective

By graphing the preferred values of the women of Midway, we find a reversal of the above trend: Midway students and faculty rank Self Respect first, freedom second, and happiness third. They then move progressively "outward" from self to the collective by ranking friendship and family next, equality and world at peace shortly thereafter. This ranking suggests that the Midway women hold values that run counter to the socialization process (both for Americans as a whole and by gender).

The next questions that arise, of course, concern whether or not the value profile obtained is "accidental" and whether or not such a value profile is "desirable." For Professor Bellah, the new secular priest of the collective, the answer to whether such a profile is desirable may be a simple "no." Once we attempt to answer such questions contextually, however, we may evaluate the profile differently. Because Midway College is an educational institution, it is the education - gender nexus that requires closer inspection.

Gender, Education and Self-Esteem: Emerging Evidence

A small but growing body of literature suggests that a disproportionate success rate exists between female graduates of coeducational schools and graduates from women's colleges:

1. Of Business Week's June 1987 list of the highest ranking women in corporate America, 30 percent received their baccalaureate degree from a women's college.*

2. One-third of the women board members of the Fortune 1000 companies are women's college* graduates.

3. Of 24 women members of Congress, 42 percent attended women's colleges.*

4. Among women listed in "Who's Who in America," alumnae of women's colleges* outnumber graduates of coed institutions by 2-1.

5. Graduates of women's colleges are more than twice as likely as graduates of coeducational colleges to receive doctoral degrees; and women's colleges produce a higher percentage of graduates who go on to medical school and study in the sciences.

6. Some researchers claim that college professors are more likely to remember men's names, call on them in class and listen attentively to their answers. By contrast, they feel freer to interrupt women and ask them "lower order" questions.

* Note: Only 1.5% of college women attend women's colleges.

The extent to which a link between "self esteem" and the educational institution exists is perhaps most evident by examining a survey of high school valedictorians. The valedictorians who "believed they were intellectually superior to their peers" revealed the pattern depicted in Table 4.

TABLE 4

Students who believed they were "intellectually superior"

	At time of HS graduation	After 2 years of college	Completion of college
Men	23%	21%	25%
Women	21%	4%	0%

Considered as a whole, the data pertaining to the education of women and its effect on self-esteem strongly suggests a relationship does exist. The evidence of such a relationship means that the value profile obtained from the Midway College sample, which differs from the American women at large profile, may not be accidental. We suggest this as a likelihood due to the juxtaposition of: (1) a value profile that is distinguished by the ranking of "Self Respect (Self Esteem)"--first for the Midway College sample, sixth for the American sample; and (2) an emerging literature that suggests women navigate coeducational institutions at a price--a cost to one's self-esteem.

Discussion

Given the methodological weaknesses of this research (a small Midway sample size, a possibly outdated American sample for comparison, and differences in ranking procedures), this study is best considered an exploratory one. Nonetheless, the results strongly suggest that students' preferred modes of conduct and end-states of existence are impacted as they traverse educational institutions, and that the nature and extent of that impact varies by gender.

We therefore applaud the renewed interest in the study of values, but we encourage researchers to study those values in context. In putting our findings to further empirical test, we would like to see similar studies conducted at another women's college, at both small and large coeducational institutions, and within American society at large (that is, an updating of Rokeach's data). It is through such contextual analysis that generalizations regarding "appropriate" level of commitment (to self and to the collective) might best be determined.

Reference Notes

1. The institution that has become Midway College was established in 1847 to prepare disadvantaged female orphans for careers in teaching. This mission was implemented at a time and place (antebellum Kentucky) where the education of women in general, disenfranchised women in particular, was of little concern to society. The school for orphan girls continued its mission until the middle of the twentieth century, when changing social conditions (free public schools, enforced attendance laws, etc.) eroded Midway's original purpose; a new direction was necessary. Consequently, the school became a high school and junior college, and then (in 1973) a junior college exclusively.

From 1973 on a number of changes took place that culminated (in 1990) in the reaching of a long-awaited goal: Transformation of the school into a comprehensive, four-year liberal arts college for women. The school has also developed a coeducational evening program, one that is expanding rapidly to meet the demands of a diverse, non-traditional student population.

2. Note that we are basing our comparisons on the rankings only, rather than actual raw scores, because of differences in statistical techniques between our rankings (mean scores) and those of Rokeach (median rankings). Further, differences in time of the measurements ("cohort effect") also could be significant. Thus, it is best to consider the data as qualitative rather than quantitative and as suggestive rather than conclusive.

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RETAINING UNDERPREPARED STUDENTS THROUGH REDUCED COURSELOADS AND TLC

Rose Ketterer
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Integrating underprepared students into existing academic programs has concerned educators for at least two decades. Traditional strategies include open admission, the abolition of all requirements, and remediation,which requires underprepared students to enroll in non-credit developmental courses. This report presents a third strategy, Drexel's Special Provisional Freshman Pilot Program, which admits underprepared applicants into part-time programs. Special Provisional students are assigned a maximum of 11.5 credits per term, and receive intensive support from the Director of Assessment and Re-entry. Tutorials and academic planning support are also provided. This approach has enabled a number of students with marginal academic background or skills to succeed in the highly structured and rigorous curriculum of Drexel University.

Overview of the Special Provisional Freshman Pilot Program

Drexel University is a technologically oriented university with stringent entry requirements. Many applicants lack the background necessary for success at Drexel. Since Fall 1988, eighty-five students with marginal academic backgrounds have been admitted to the Drexel Evening and University College through the Special Provisional Freshman pilot program. The program goal is to provide a transition from high school to a rigorous full-time undergraduate program for students who would not normally be admitted to Drexel.

The Evening and University College serves all part-time Drexel students. The Special Provisional program allows students to progress at a reduced academic pace, a maximum course load of 11.5 credits per term (the full-time courseload is 12-20 credits, with most taking 16 or 17). Special Provisional students remain part-time for at least one full

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academic year. A major component of the program is on-going academic advisement and support in setting personal goals, provided by the program Director. Students enroll in required introductory courses in the their selected academic majors.

Academic progress may be slow, as students in danger of failing a course are advised to drop it in order to preserve their cumulative grade-point average (CUM). Tutoring and study skills workshops are provided free of charge. Students may transfer to a full-time program after completing 36 credits with a CUM of at least 2.5.

Purpose of the Study

The purpose of this analysis was to determine whether the test scores and performance measures collected on Special Provisional students might be used as predictors of success or failure at Drexel, or as indicators of students at risk. We also wanted to demonstrate the success of the program.

The Population

The 85 Special Provisional students consisted of persons who failed to meet the usual Drexel criteria for admission to full-time undergraduate programs because of limited math background, low high school CUM or low SAT scores. Most Special Provisional students (82 of 85 individuals) were 18 or 19-year-olds who graduated from high school in the spring and enrolled at Drexel the following autumn. Three participants had interruptions between high school and enrolling at Drexel of 1.25, 5.25 and 7.25 years respectively.

Procedure

Age and educational level were substantially the same across the population. Therefore data analysis focused on the following parameters: SAT Scores, first term CUM, withdrawal (W) from one or more classes during the first term, or failing (F) one or more classes during the first term. An "excellent" first term was one in which a student achieved a CUM of 3.0 or higher, and had no W's or F's. A "good" first term was one in which a student achieved a CUM of 2.5 or higher with no W's or F's. The population was composed of the following five categories:

1. students who permanently dropped from the program
2. students who temporarily dropped from the program and later returned
3. students who withdrew from Drexel to transfer to another college/university

4. students who continue in part-time Drexel programs
5. students who have moved from part-time to full-time status or who have qualified to do so when funds and time are available.

Results

SAT scores of Special Provisional students showed no predictive pattern. Mean scores clustered in a tight range: Verbal 356-392, Math 414-461 and Total 785-850. Mean first term group CUMs ranged from 1.40 to 2.60. Table One displays the first term data on the five groups. The percentage of students having to withdraw from one or more classes during the first term ranged from only three percent for those who became full-time students to 80 percent for those who dropped out of the program permanently. Percentages of students failing one or more first term courses ranged from zero percent for one group who stayed in school to 43 percent for students who dropped out permanently. The percentage of students with a good first term ranged from six percent of the permanent drop-outs to 63 percent of those who became eligible for full-time work.

Students Who Dropped Out

About one third of the total population, 27 students, dropped out of the program at some point. However, five of these students later returned, for a drop-out rate of only 22 students to date. None of the 22 permanent drop-outs had an "excellent" first term (CUM at least 3.0; no W's or F's) and only one had a "good" first term (CUM at least 2.50; no W's or F's). Most permanent drop-outs withdrew from, and more than a quarter of them failed some of, their first term courses. This group s Mean CUM, 1.40, was the lowest in the study.

In their first term, the dropouts made up only six percent of those with "good" first terms, but 42 percent of those with F's, and 50 percent of those with both W's and F's; 20 of the 27 permanent dropouts had CUMs of 2.0 or less.

Five students left before the end of the first term. Another ten dropped out at the end of the first term (two later returned to the program), eight more left at the end of their second term (three returned to the program), and five, at the end of their third term (one returned to the program).

The students who dropped out temporarily showed, as a group, a slightly different pattern than that for permanent dropouts. Two had an "excellent" or a "good" first term. The group had a Mean CUM of 1.72, higher than the permanent dropouts, but lower than groups that did not drop out.

Table One: Retention of Special Provisional Students by First Term Performance

First Term	Total N	"Good"*	W's	F's	W's&F's	CUM <2.5 & W's/F's
__ Population Total Study	85	16	38	7	6	19
Dropped Out/ Did Not Return	22	1	16	3	3	3
Dropped Out/ Returned **	5	2	1	1	1	2
Withdrew to Enter Other Schools	16	2	9	0	0	3
Still Part-time at Drexel	31	4	15	2	3	7
Full-time or Full-time eligible ***	19	10	1	1	0	7
Overall Retention	63	15	22	4	3	16
Drexel Retention	50	14	16	3	3	14

Notes:

* Good First Term - CUM >=2.5, no W's, no F's.

** In this group, one is included below in the 16 who "withdrew to enter another school", four are in "still part-time at Drexel".

*** Three of these 19 students are also counted in the group who withdrew to enter another school. However, they were counted only once in the "Retention Totals" category.

Students Who Withdrew From Drexel to Transfer

Of the 16 students in this category, three became full-time students while at Drexel, transferring to other schools only after five or six terms here. None of the other transfers stayed for more than a full academic year. One third of the transfers occurred following their second term at Drexel, and another one-third following their third term. The Mean CUM for this group in their first term was 2.06, higher than any other group except the full-time students. Ten had first term CUMs of at least 2.0, and five above 2.5. None had first term F's but 56 percent had first term W's.

Reasons for Dropping Out or Withdrawing from Drexel

Most of those transferring to other schools cited financial or personal reasons. However, more than half of these students had first term W s, suggesting that the coursework was too difficult for many of them. Reasons given for leaving Drexel: Financial 35%, Unknown 21%, Personal 29%, Medical 6%, Grades 6%.

Continuing Part-time Students

In this group of 31 students, only 13 percent had "good" first terms; a few had first term F's. Mean first term CUM was 1.96., with 26 first term CUMs under 2.5. The group shows variable first term performance, making up one fourth of all students with good first terms, but two fifths with W's, nearly one third with F's, half of those with W's and F's.

Full-time and Full-time Eligible Students

Fifty-three percent of the students who became eligible for full-time status had "excellent" or "good" first terms (Table Two). This was more than twice as many as in any other group. They made up 63 percent of all those with "good" first terms. Eighteen of them (95%) had no W s or F s during the first term. Their Mean CUM of 2.60 was much higher than any other group. Fourteen (74%) had first term CUMs off at least 2.0, and 11 (58%) had first term CUMs of at least 2.5.

Discussion

After two years, at least three-quarters of the students enrolled in the Special Provisional Program, sixty-three individuals, have continued in higher education, even though five have had some interruption. There may actually be more students who went on to other schools, since five of the students leaving Drexel did so without giving reasons. Fifty students remain at Drexel. This level of retention in a population lacking the basic entry level credentials for full-time Drexel admission indicates the success of the Special Provisional program.

Table Two: Retention of Special Provisional Students by First Term CUM and SAT Scores

	Total N (%)	Mean 1st Term CUM	Mean SAT Verbal	Mean SAT Math	Mean SAT Total
Study Population Total	85	1.94	376	428	804
Dropped Out/ Did Not Return	20 (23)	1.40	382	414	796
Dropped Out/ Returned *	5 (06)	1.72	388	462	850
Withdrew to Enter Other School	16 (19)	2.06	392	442	834
Still Part-time at Drexel	31 (37)	1.96	371	425	797
Full-time or Full-time Eligible	19 (22)	2.60	356	428	785
Total Retention	63 (74)				

The students' SAT scores show no predictive pattern and cover nearly the same range and Means for all groups. Mean CUMs for different groups vary from the lowest for the groups of permanent dropouts to the highest for the group who became full-time students. However, first-term CUMs in and of themselves were not predictive. In at least two cases, students who dropped out permanently had first term CUMs of 3.0, and five students who eventually became full-time had first term CUMS equal to or less than 2.0.

A more revealing indicator was performance during the first term. Special Provisional students were advised to hedge against low CUMs by withdrawing from courses they were in danger of failing. Thus, W's as well as F's may be viewed generally as identifying students at risk. Performance during the first term was especially critical. Even with extensive tutoring, certain students lacked the math or study skills needed for Drexel coursework. In this context, it is important to note that of the students who transferred out of Drexel, none had first term F s but more than half had first term W's. Several students transferred to schools with less rigorous math requirements. Of the students who became full-time, only five percent had first-term W's or F's, and none had both W's and F's. By contrast, in the group of permanent dropouts, 86 percent had W's or F's or both. The group who dropped out and later returned to Drexel had 60 percent in this category. Just over half of those who withdrew from Drexel to attend other schools showed first term W's, and none had F's.

The group of students who continue as part-time had results that were much less definitive: a few W's and F's, both high and low CUMs. The group includes some academically proficient students who maintain part-time status for financial or scheduling reasons. Others, less academically gifted, can nevertheless continue in higher education with reduced course load, tutoring and supportive intervention from the Director of the Special Provisional program.

The strongest predictor of success to date is the good first term, in which the CUM was at least 2.5 and the student had neither W's nor F's. Nineteen percent of the population fell into this category. Of those students with "good" first terms, only one dropped out, and the rest (94%) were retained in higher education. At least 63 percent of those with Good first terms have become full-time students. Others appear able to do so, but have not yet been in the program for the required full year.

The key, in terms of retention overall, seems to be the lack of first term W's and F's. The group with a first term CUM under 2.5 but no W's or F's showed a total retention rate of 84 percent and made up about one third of the students who stayed as part-time. Students who had first-term W s or F s were retained between 50-58 percent of the time; only four percent became full-time regardless of first term CUM. The first-term CUMs for these students were quite varied, based on a small number of credits, and not necessarily helpful in predicting educational persistence. No one with both first-term W's and F's has earned full-time status to date; half of this group have dropped out.

Students who fail or withdraw from classes in their first term are at much greater risk of dropping out, even if their CUM is relatively high. Failure in or withdrawal from basic freshman courses indicates that a student lacks the academic preparation or study skills needed for survival at Drexel. Very few students with a shaky first term have been able to go on to full-time status within the first two years of the Special Provisional program. Students who manage to complete all their first-term courses, even those with CUMs below 2.5, stand nearly as good a chance to be retained in higher education at some level as students with "good" first terms. However, not as many in this group will go on to full-time status. More than ninety percent of students who complete all their first-term courses and achieve at least a 2.5 CUM for that term will be retained, and over 60 percent will achieve full-time eligibility within two years.

Implications for Future Study

The "good" first term is our best predictor of success to date. Several factors seem to contribute to a "good" first term. Further identification of the contributing factors to a "good" first term may help to increase the rate of retention.

The student s motivation is one factor. For example, many Special Provisional students fail to keep appointments with their tutors. They also fail to notify tutors of planned absences or to reschedule appointments. One area for future research involves motivating more students for academic success.

Family support may be another important variable. Parents of Special Provisional Students are invited to attend the Orientation program, and encouraged to call the program Director with any educational concerns. Students whose parents stay in close contact with the Director tend to fall into two groups: those who make good progress and become eligible for full-time programs, and those who perform minimally and wish to leave Drexel. One motivational tool could be a handbook for parents, offering specific suggestions for supporting their children through the transition to life at the University.

Future study might also examine the credit load carried by Special Provisional students to determine whether "good" first terms are more likely to result from lighter loads.

"CAN'T SEE THE MOON FROM HERE"
TEACHING WOMEN IN PRISON

Robert H. Lafleur

Introduction

On a summery September afternoon in 1989, twenty students sat in a circle behind battered desks in a freshly painted but barren classroom. On each desk lay an open copy of a Western Civilization text and a new, relatively empty notebook. The instructor, the only male in the room, was guiding a discussion of the crucial but poorly documented neolithic revolution that followed domestication of plants and animals, the building of permanent settlements, and the establishment of rigorous social, religious, and political institutions.

The discussion had just focused on a set of unsought and unexpected consequences of this revolution: there had been a great gain in freedom and concurrently a startling loss of freedom. Town walls, political and religious leaders, division of labor, and food surpluses had freed people from insecurity and uncertainty. But individuals, kin groups, and clans had lost their freedom to be independent agents; everyone worked and shared as social classes solidified. These problems of freedom particularly fascinated the students. Then one commented:

"How do the pyramids fit with all this?"
"What do you mean?"
"Well, were they part of this new freedom?"
"Let's think about it. Who built them? And why?"
"They were built to impress. And to contain dead kings."
"Pharaohs?"
"Yes. But we built them with our sweat and lives. So pharaohs could go to heaven. What did we get? Big monuments?"
"Could be. Who on earth could have taught us to agree to such a trade-off?"
"The big leaders and the religious leaders! They're still doing it. Especially the government and the preachers."
"How about those other mysterious monuments? Like Stonehenge?"
"But they aren't city walls. Nobody lived there except maybe witches and magicians and Druids."

Robert H. Lafleur, Associate Professor, Mary Baldwin College, Staunton, Virginia.

"Don't get Druids into this. But you're right. These circles of standing stones were difficult to build, cost lots of human labor, and don't seem Neolithic at all, although they have been discovered in many places throughout the West. So what were they good for, used for?"
"To impress. Religious and spiritual impressions."
"As secret places only the leaders could go to?"
"I've heard they were observatories to keep track of time and the stars."
"Well, I heard it was a place for flying saucers to land!"
"A place to get all the people together and impress them with the stones, some acting, some singing, some dancing?"
"Maybe a human or animal sacrifice?"
"Sounds good. When? Using the sun as a calendar?"
"No, the sun isn't going to work. It marks days and nights, but we all know that years are too long."
"How about using the stars?"
"Too complicated. But there is another object in the night sky that regularly changes shape and gives accurate cues about the passage of time. It's the moon, of course, and even now we still notice it with a lot more than casual interest. Then the leaders could assemble, say, at the next full moon. Now we look at the moon in new and old ways--haven't you ever . . . ."
"Sorry, we can't see the moon from here."

The instructor paused, stunned by the poignant and stark last comment, its radical innocence and gutsy realism. She was right: these students usually couldn't see the moon. They were all prisoners, locked in their rooms at night. The discussion, by the way, did circle back to the neolithic revolution and its enduring impact. The comment continues to haunt.

But what is a veteran Mary Baldwin College history professor doing in a classroom in the only correctional facility for women in Virginia? This paper attempts to explain the evolution of the unusual pilot program that placed him there, the instrumental forms that have evolved over nearly three years to administer it, the unique research insights provided by adult women prisoners as college students.

The Long Road to Goochland

Mary Baldwin College is a small liberal arts, church-related institution located in Staunton, Virginia, at the center of the Shenandoah Valley. Founded in 1842 as a seminary for young women, it became a woman's college in the second decade of this century. It remains today devoted to education for women and to a variety of educational outreach programs that serve the larger community. In the past decade and a half, several innovative programs have been added: one for adult learners, male and female; one for exceptionally gifted younger women who earn high school and college diplomas during their residency, and an exchange program with several Japanese educational institutions that mostly brings significant numbers of Japanese women (and in the summer, men as well) to the campus. An average academic year these days finds 600 and more traditional students on campus, 50 and more exceptionally gifted youngsters (age 13 and up), 100 and more Japanese, and between 500 and 600 adult learners, in residence rarely but often in the classroom and library. One curriculum, mildly prescriptive and requiring courses in a wide variety of academic areas, leads to one degree for all of these populations. Mary Baldwin's faculty have become accustomed to the sight of a thirteen year old sitting beside a seventy year old who in turn sits beside a Japanese exchange student. With all of this diversity, academic standards remain high. There is an active honors program and a Phi Beta Kappa chapter as well.

The College's relationship with prisons and prisoners is not entirely new. Since there is a fairly large correctional facility three blocks from the College, the expected relationships between institutions arose. Professors did workshops and visited the facility with their students. Students did volunteer work among the prisoners. More recently the Virginia Foundation for the Humanities and Public Policy helped fund two major educational projects involving twenty male prisoners in a seminar on the subject of inward odyssey and in an academic course on justice in the USA and USSR. As a result of these projects several inmates applied for acceptance in the Mary Baldwin College Adult Degree Program, and one has followed through and is now only a few credits short of a degree in sociology and social work.

Everyone who worked in the prison education program found it sound and frequently exhilarating. The Director of Continuing Education, a former social work professor himself, quickly identified college-in-prison as a feasible and useful new program. The Director of the Adult Degree Program agreed that the ADP had in place already sufficient delivery systems (individual tutorials, learning contracts, prior learning credit portfolios, correspondence courses, courses offered by other accredited institutions, standardized examinations) to make a college education behind walls work. Administration leaders agreed that the enterprise fell within the mission of the College, and all agreed that what we proposed to do would not be some remote process of collecting credit's and then graduating the prisoner: we would see to it that our faculty met and taught individuals and groups in the facility.

But where to start? Our initial plan was grand indeed: all prisoners in the Commonwealth (13,000 at the time in 1987, rising to 20,000 later) would be eligible. Three facilities, all male, were targeted for special educational programs, the two large ones near and in

Staunton and a small nearby field unit that would by gradual reassignment come to house a population of full-time students. We also did our homework. Studies were perused, programs were visited and inspected, experts were brought in. The Director of Continuing Education (having added the new title of Director of Prison Education) initiated meetings in Richmond with the Department of Corrections and the Department of Correctional Education. They were interested and months of meetings led to the draft of an agreement. Then, suddenly, two roadblocks appeared.

Internally, generalized grumbling became organized opposition. By and large, students (of all three sorts) had no problems at all with being classmates, in effect, with prisoners. Some administrators saw plenty of potential bureaucratic problems but were not opposed. Predictably some alumnae were aghast at the prospect of handcuffed prisoners accompanied by armed guards marching in the graduation ceremony. But the faculty raised the single most substantial (and, as it turned out, enduring) obstacles. Some for their own reasons shuddered and said no, never would they teach in a prison. Others feared one more addition to an already heavy workload. Some couldn't imagine a full workday spent at some far corner of the state. And many simply believed that the college was already doing more than enough to fulfill its historic mission. The Director of Prison Education made an eloquent and powerful presentation to the faculty and the program was approved in principle as a pilot and experimental project.

The second roadblock proved immovable. Someone somewhere in the state system decided that if such an ambitious enterprise for college education in the prisons materialized, all education institutions in the Commonwealth ought to be solicited and allowed to bid for the honor of starting such a program. Invitations duly were sent out, bids were submitted (including an initial agreement) and then nothing, absolutely nothing, happened. Money, administrative complexities, and the need for further study were all cited by way of explanation.

A bit more sophisticated but without rancor, we regrouped and came up with a more modest proposal. Mary Baldwin is a college for women. Women have become major clients for higher education, most often through non-traditional means. We already had a successful non-traditional program for such adults. And, an extraordinary fact, there was a perfect target for all our effort. A perfect marriage: a college seeking nontraditional adult female students and a facility, the only one in the state, full of female prisoners (Full indeed: built for 300, it was approaching a population of 600.)

Suddenly Goochland, town and facility, loomed large for Mary Baldwin. There were many visits to the prison and to its thriving education program (high school equivalency classes and several evening courses in business offered by a branch of a community college). The Director of Prison Education, still a minister without anything in his portfolio, returned to meetings with the Richmond prison and prison education authorities and worked out details with them and with the enlightened warden at Goochland. In the fall of 1989 there was a Mary Baldwin College program at Goochland. A first really: full-time, liberal arts, degree seeking female students who could look forward to earning a BA degree.

Going to College on the Women's Farm

The town of Goochland is typical of Southside Virginia--small, flat, every business and church strung out on a single main street (the highway), a population of commuters and farmers. The prison at the edge of town is not typical at all. Driving past it (heading toward the large men's facility at Powhatan) one might think it another of those numerous small and tranquil colleges of Virginia. The Virginia Correctional Center for Women, dating from the 1930s, has beautifully landscaped grounds, curving roads, impressive and well-kept buildings. No walls, no armed guards, no outward signs of a prison at all. There are no uniforms and women move about in groups much of the day, some working on the landscaping, others going to classes, still others pushing shopping carts about after a visit to the commissary. When one looks a bit more carefully, though, one finds the prison. One wing does have guards and fences; it houses the maximum security prisoners. The leaded glass of the other residences are bars. At certain and fairly frequent intervals everyone vanishes to be locked up and counted. But in general it seems a pleasant college campus (complete with its own groves and pond, a few cows left over from the days when the focus was on substantial farming, the only remnant of which is the local nickname for Goochland, the Women's Farm. It was to this campus that Mary Baldwin Came to create a college in September, 1989.

The Director of Prison Education had done his work well. Several classrooms (used at night by the community college) had been refurbished, and other meeting rooms and a faculty office were made available. All these were in the basement of a largely disused gym, these days reactivated mostly for those melancholy and awkward meetings of prisoners with families and friends on designated visiting days.

A staff had been hired, too. Clearly Mary Baldwin professors were not likely to volunteer in sufficient numbers, so the Director used the perfectly legitimate and standard procedure of hiring staff mostly from Richmond who were a combination of adjunct faculty and Adult Degree Program tutors, all of them approved by the College's faculty and all listed as Mary Baldwin faculty in the College catalogue. As it turned out, half the staff were Mary Baldwin professors and half were newly hired faculty. One of the latter not only taught English but also served as coordinator of the program on site at the prison, The calendar was exactly that of the college: registration, first class, exams, even vacations (imagine the prisoners' bitter reactions when they learned that they had a "fall break" or "Thanksgiving vacation"). The curriculum was also exactly that of the College. The number of courses taken in a given semester followed the Adult Degree model. The first semester offered courses in English composition, literature, Western civilization, introductory sociology, and anthropology. Scheduling was a bit awkward, accommodating as it had to the fact that some faculty could only be at Goochland one day a week for a very long class, but in the end it worked and all students had what amounts to a full week of classes.

Recruitment of the 40 students came through presentations, advising by the high school teachers, and word of mouth. Each student had, of course, a high school diploma or its equivalent, and several had a year or two of college as well. Registration day included formal registration with the College, selection of courses, completion of financial aid forms, meetings with the faculty and billing for a token tuition charge of $25 per student. (Each Goochland prisoner is paid for her work hours, including studying, and the money usually is used to buy cigarettes and food. Twenty-five dollars can buy a lot of cigarettes and cookies).

The profile of the entering group set a pattern that has remained nearly unchanged for two years and is very close to that of male prisoner student populations. Ages range from 23 to 54 with two large clusters at about 33 and 38. Most of the Goochland women are white, about a half dozen are African Americans, and several are Hispanic or Native American. (These data worried us in 1989 and still do. Goochland is predominantly black. We realized that entrance requirements and the very image of college would be discouraging, but we still want to reach more minority students. As other prison programs have learned it is wise to build in a remedial or pre-college program to prepare such potential students). As many students had high school diplomas as GED certificates; a few had a year or two of college. In penal institution terms, although we never included these in our criteria for admission, the range of criminal convictions was fairly typical: a few murders, a lot of drug-related convictions, and a lot of "paperhangers" (bad checks, credit card forgeries, and the like). All of this last information was of coursed privileged but most of it surfaced in class discussions.

There were problems to be sure. Six of the first forty did not complete the first semester. Two were released (one of them promptly entered the ADP Program), two decided they wanted preprofessional and not liberal arts courses and shifted to the night classes, and two simply could not do the work. Some of those who remained in the classes were clearly marginal, admitting that taking courses was easier than raking leaves and believing that college-going would help greatly at parole time.

The range of backgrounds and abilities was wide and all of the faculty soon learned that much teaching time needed to focus on note-taking, essay-writing and test-taking.

Other problems proved a good deal more intransigent. It's a fair assumption that few in the professional prison system thought the college-in-prison would work. Our requests were therefore treated with courtesy but without serious urgency. Mostly these were small matters that eventually got solved--audio-visual equipment, maps, paper supplies, and the like. Some had larger academic consequences. All the computers in the facility were used full-time by the high school programs. Getting visitors into the classroom (individuals and larger groups, including a College theater production) took much planning and pleading. Students were regularly yanked out of class for any reason (the dentist was on the grounds, someone needed to see the student prisoner). Guards were dubious about the program and narrow of their interpretation of their role in it ("No, you can't teach your class outside on the grass" and "Why give them a free education? I deserve one, too." We leaped on that one, offering the guard the same college curriculum as her charges, but that was vetoed quickly by the administrators of Goochland). Sadly, we never yet have found a way to keep the momentum of the classroom alive in residential life. Each student returns to her room; each eats meals in her own building; nothing has been done yet to bring these people together in residential groups.

The worst problem has been access to written resources. The Mary Baldwin Program provides texts. Students were supposed to own these but eventually prison authorities vetoed this. Then a dream list of new books in storage given by publishers to the state correctional system appeared. Did we want any? Out long request list went unfulfilled. The little Goochland prison library is an attractive place but it features mostly recreational reading. It also allows a prisoner 15 minutes in the library every two weeks and permits only two book checkouts per visit. We now have our allowed time up to 25 minutes per two weeks but anything approaching research papers will not soon be feasible for this college student group.

Learning & Longing: The Program Faces the Future

The end of two years is an excellent time to take a snapshot of this pilot program. Two other factors now make evaluation and projection even more necessary. The founding Director, whose vision, courage, and energy have kept the program going, is retiring, and the unstable economy makes the financing of the program uncertain. The Goochland project has always been paid for by a series of intelligent improvisations but longer term budgeting continues to await firm and permanent commitments from government and some hard decisions about size and scope. Obviously, Goochland has not been a profit-making venture; it remains emphatically a service outreach.

And yet, at the moment of the snapshot, there are reasons for optimism. Currently 44 women prisoners are engaged in a full-time liberal arts degree program. Many, probably most, are emphatic about how important this is to them. Those of us who have been involved in the program from the planning stages take quiet satisfaction in a palpable change in attitude, among the authorities at Goochland (Mary Baldwin really seems now capable of pulling this off) and on the Mary Baldwin campus (few faculty volunteer to teach in the prison, but no one questions the superb adjunct or tutorial faculty who do so).

Viewed over time, the Goochland experience has begun also to yield insights that enrich everyone involved with the program--students, prison administrators, college staff, and teaching faculty. The ripple effect has already reached into unexpected corners of our academic, administrative, and personal lives. Such rewards from teaching are certainly the most holistically satisfying outcomes of a venture such as this one.

But let us conclude by being specific. What have we learned? Here are some samples, some very concrete and others abstract and conceptual.

Learning and Working in Total Situations. After the second world war, particularly after concentrated massive bombings and especially the death camps, there arose a model among sociologists, psychologists, and historians that focused on these experiences as "total." By the 1960s, that model had been extended to include mental hospitals, prisons, and even submarines crews, and alienated assembly-line workers. Total situations define populations as keepers and kept and redefine most normal human relations and values. Although the model has not become mainstream, the Goochland facility certainly displays it in pristine form.

Learning Environments. Just how primitive can a learning environment be? For instructors, particularly, it is a useful corrective to engage in college-level endeavors without the cushion of audio-visual aids, films, videos, and photocopiers. The prison environment presents plenty of negative challenges to be sure, but also offers some pointed and unique opportunities (where else, for example, can kept ask keepers to define justice and learn that the prevailing answer is punishment?)

Authority. Prisoners everywhere learn tactics of outward obedience and inward individuality. So do most college students. How can such attitudes and behaviors be channeled into learning?

Time. No concept among prisoners is more startling, especially for a teacher of history. Time past means little. Time present is overwhelmingly defined by the prison sentence: time is put on hold and everything will be exactly the same when the prisoner returns to the outside world. Yet each prisoner knows that the world is changing and that everything will be different.

Responsibility. Prisoners know that the system reduces them to childlike dependence. The prison college encourages larger personal and group responsibilities. The Goochland students founded their own student government association based on College models and all students are bound by an honor code. Students aggressively negotiate with Goochland authorities for exceptional events--speakers, plays, and so on.

Trust. There was no bigger surprise than this: prison students could be open and honest in individual conferences, but taciturn and suspicious when gathered in class. The reason, of course, has to do with life outside the classroom. Study together and open classroom conversations have slowly built trust that may in turn influence residential life.

Goals. In a world without fixed values, expectation or rewards, empowering a student to set her own academic goals and then reach them can have remarkable consequences. We learned early on that goal-setting had to entail not only specific content but also acquisition of basic skills in note-taking, test-taking, and research.

Dialogue. Adult prison students, we have long known are motivated and articulate. Ideas and opinions flow. But listening to the ideas of others and building sustained arguments require lots of encouragement and practice.

Tolerance. Similarly, learning to accept diverse views, convictions (especially among born-again religious enthusiasts) and evaluations requires practice. No single class session this professor led provided more discomfort and agony than the one in which each student, in turn, was obliged to forge an argument exactly the opposite of her own already expressed point of view.

Community. As a patch of freedom of thought and expression, the college within the prison provides special inducements to community formation. Mary Baldwin itself has become part of that sense of community, expressed in many ways, not least in the wearing of College sweatshirts.

Outreach. Once the classroom community exists it has a real obligation to spread its values among the entire Goochland population by actions, conversations, and contributions to the life of the larger community. No real tensions about role and status have surfaced.

Personal Change. Developmental transformations are bound to happen in such a heady environment and indeed they do. Self-scrutiny and self-confidence both increase. For women these can often be crucial. A liberal arts education helps. It may be we cannot always make the moon visible at lock-up time, but we can walk together with a student who is seeing something more important. Here is how one of the Goochland students put it: "I have to think different now. A different way. I have been here for 13 years and most of my thinking has been done for me . . . . College has forced me to think for myself."

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METHODS TO INTRODUCE NONTRADITIONAL/INTERDISCIPLINARY UNDERGRADUATE STUDENTS TO GRADUATE EDUCATIONAL OPPORTUNITIES

Patrick K. Melia

Introduction

Nontraditional students enter or return to educational institutions for a variety of reasons: personal development, desire to increase earning potential, need to increase their general knowledge base on interesting topics, or to gain credentialling which may be used to propel them to advanced degrees or career changes.

As teachers of both traditional and nontraditional students, we see one or a combination of these needs and rationales every semester. As administrators and advisors, we try to help students recognize the multitudes of courses and opportunities available to them. In many cases, students from nontraditional situations and backgrounds or those studying in interdisciplinary areas may not have received in-depth disciplinary counseling. This counseling is routinely provided to students in traditional majors considering advanced opportunities available to them for graduate and professional study or career paths with which their academic endeavors are compatible. This may not always be the case with students in interdisciplinary programs.

This paper explores the mechanisms by which advisors and professors of nontraditional and interdisciplinary students can provide early intervention academic counseling to improve these students' chances and opportunities to gain access to graduate and professional programs. Many of these students neither recognize their own academic potential nor realize their ability to satisfactorily compete for post-baccalaureate admission until well into their undergraduate programs. These students may also be reluctant to pursue ideas concerning their personal plans for the future with professors and program administrators until significant trust has developed. An advisor/advisee relationship must be developed early in these students' careers to assist in the identification of potential career goals and cognitive plans which may remain only unfulfilled dreams if advisors do not recognize the prerequisite structure needed for admission into graduate and professional schools. With only a

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limited amount of time and effort faculty can familiarize themselves with general prerequisites for graduate disciplines and various professional programs. Many publications also provide specific information and programs addressing these students' needs and questions are offered by national educational organizations.

Since faculty mentors and administrators are all involved in trying to improve opportunities for success of nontraditional and interdisciplinary students, these opportunities and resources should benefit not only individual students but help to improve the institutional integration of these students into the mainstream of academic life.

Familiarity Breeds Understanding

Faculty members and administrators have in recent years witnessed an amazing increase in the number of nontraditional students studying in academic programs in American higher education. During the past five years, enrollments of traditional students under 25 years of age and nontraditional students over the age of 25 have roughly paralleled each other, increasing a total of eight percent. The previous fifteen years (from 1970 to 1985) were another matter altogether. Nationally, this period in college enrollments for the traditional under 25 age cohort only increased a total of fifteen percent in fifteen years. This is in stark contrast with the base increases exhibited by nontraditional students in the over 25 age cohort. This population experienced an increase of 114 percent in enrollment nationally during this period and has been increasing gradually since then.[1]

This increase to the base enrollments has caused many changes to the ways in which colleges and universities deal with nontraditional students. These students have returned to postsecondary education for many reasons, notwithstanding an intense desire to delve into many academic opportunities previously unavailable to them due to institutional, structural and academic disciplinary considerations. The opportunity afforded nontraditional students to enroll in interdisciplinary programs not only opens previously unavailable avenues of knowledge to these students but also offers the chance for faculty to reevaluate their pedagogical methods and mentoring skills. The approach which faculty employ when addressing a group of 18 year old freshmen direct from high school should be quite different than the teaching styles employed before a classroom full of returning adults and seasoned professionals. These returning students have lived through many of life's experiences and are not accustomed to the lecture styles used on more passive audiences.[2] The use of new, more dynamic instructional styles which blend an interdisciplinary approach toward material and allowing for student participation and interaction is critical when dealing with nontraditional populations wanting to identify the interrelated nature of education.

This need related to the practical nature of what is being taught in the classroom is quite evident to faculty who have counseled these students with regard to their academic futures.

The same is true when faculty members deal with these students in the capacity of a mentor. Older, mature nontraditional students and particularly those taking a variety of interdisciplinary courses many times exhibit a number of seemingly contradictory behaviors. Having a more finely developed sense of their own experiences and capabilities, these students more readily identify their academic goals and aspirations. Yet, and speaking in generalities, these students do not always possess the academic confidence within themselves to openly and freely talk with faculty and administrators about which methods are best to use in pursuit of these goals. Young undergraduates, completely unaware that there may be many galaxies beyond their grasp, rarely have defined their future in concrete enough terms to set reasonable goals which a mentor can translate into accessible pathways. This is in stark contrast with the returning student who may have realistic goals but is insecure about or who lacks the confidence to enter into the detailed exchange of ideas and even dreams about their future.

The trusting relationship between mentor and advisee must be developed over an extended period of time and reinforced with classroom experiences between the participants. Unfortunately there are several structural impediments which work to make the academic goals of nontraditional and interdisciplinary students much more difficult to achieve than those of resident undergraduates. This is mostly a situation in which the perceived and actual aspects of an interdisciplinary program designed to make to it attractive to nontraditional populations may hinder these students' success.

As is well known, the importance of the development of an advising/mentoring process is critical to the achievement of these students. Facing the insecurity of some of those students while designing an academic program based on mutual trust is a challenge to most time-restricted faculty. This problem is exacerbated by the fact that most of these returning students are forced to work full time to live and therefore have little time during regular faculty hours to develop the relationships which traditional undergraduates establish with their faculty. It takes an extended period of time to develop these trusting relationships and the non-academic responsibilities of these students tend to grow to fill available time.

Class contact with a potential mentor, then, is a good starting point for many students enrolled in interdisciplinary programs as they identify faculty and begin to develop interests in specific disciplines, methodologies, and research topics. Yet here the attractiveness of the opportunity to take classes over a broad range of disciplines tends to restrict the more long range goals of the enrollee rather than expand them. By taking classes in many subject areas, little depth of topical mastery is established. The same is true in the search for faculty to help guide research who possess an established relationship and understanding of the scholarship of the student. Most faculty would prefer to have a classroom-based record of student abilities before agreeing to mentor or advise student research. While this can be established in one course, it is preferable to witness student achievement on more than one occasion before assuming this role. Yet encouragement of students to take classes in a wide range of academic areas may preclude the establishment of this relationship and the recognition of the methodology and body of knowledge in various disciplines.

While not recommending the development of another major, the establishment of a program track to insure that students who realize greater aspirations after attendance within the program must be recognized by administrators and faculty. This would improve the advising and mentor structure and also assist those students whose success within the program fosters that special desire for further academic accomplishments. Here once again the critical value of the mentor is brought to fruition.

The mentor is particularly important to students who may have experienced significant time breaks in their academic programs. Developments within academic fields occur with great rapidity, and it is often quite difficult for someone closely monitoring academic disciplinary and institutional change to keep abreast of new developments which will affect student career paths. Returning students must depend upon their mentor to direct them through the difficult range of choices on course selection to fit their career and professional needs. Nontraditional and interdisciplinary enrollees must have sufficient trust in their mentor to bridge any generational or academic gaps between them to arrive at honest decisions regarding their academic futures. These may include courses covering literary interests, lifelong goals or continued academic and professional pursuits. The early establishment of these pathways will help to avoid lost time and energy of returning students if they choose to develop a specialized interest in advanced educational pursuits.

The value of interdisciplinary programs is that they permit students to explore varied academic fields without finding themselves committed to the "lock-step" required by some majors. Of course, the other edge of this sword is that students taking a wide range of completely unrelated courses frequently are unable to discern relationships which exist within and among academic fields. A sufficient grounding in at least one field of study helps students to recognize that academic methodologies do differ between disciplines and that an understanding of these differences and similarities adds to an interdisciplinary students' appreciation of advanced education. Their recognition of education as a seamless garment of knowledge is critical to their realization of the value of advanced education.

It is the job of a good mentor to foster this understanding and assist students in recognizing what is good research and how it is identified, organized and carried out in specific fields. The same is true in helping students to select and identify topics for their own research and investigation. It is important for students to have a sufficient grounding in a topical area to understand good research techniques and procedures which will help them in future educational endeavors which they may choose to pursue. The simple knowledge and availability of respected journals in specific disciplines provides a wealth of resources to students who may have been unaware of their existence or quality of research without the help of the mentor.

Mechanisms for Success

The information resource role of the mentor cannot be underestimated when and if students realize that they have what it takes to succeed in graduate or professional education. A good mentor will be able to recognize and help translate academic mastery into future opportunities by their students. While many nontraditional and interdisciplinary students early in their academic careers lack the confidence and recognition of their own abilities, this is where the recognition of academic potential by a good mentor comes to fruition. Mentors should recognize this potential in the early stages of the academic career of these students and foster their enrollment in a rigorous and challenging series of courses designed to not only satisfy their multi-disciplinary appetite but also provide the depth needed to provide avenues for future academic endeavors.

With just a limited expenditure of time and effort mentoring faculty would be able to develop an understanding of the mechanisms, academic prerequisites and procedures which will give their advisees the edge they need to compete for admission and financial assistance from graduate and professional schools.

It has long been recognized that an education in the liberal arts is one of the best ways to help our students respond to and manage change. An academic preparation which introduces students to a multitude of situations and the requisite solutions is a preparation for life, which by its very nature requires a multidisciplinary and an interdisciplinary perspective.[3] Those students, when competing for opportunities afforded them by graduate and professional schools, are many times at a distinct disadvantage due to the limited disciplinary focus of their programs. Yet this need not necessarily be the case if through an interventionary mentoring system students could be counseled to link groups of related courses together in an effort to improve them as candidates for advanced education without limiting the creativity of studying in an interdisciplinary program. The same is true with identification of prospective graduate and professional schools offering special focus programs, information on admissions opportunities, availability of financial aid resources and special aid programs, and other information on types of examinations, procedures and mechanisms to assist special candidates.

Information on these programs and opportunities is readily available to both students and mentors alike. Many sources are easily accessed and located right on most campuses. These include opportunities provided by Career Planning and Placement centers, which not only have catalogues and reference materials on academic programs and institutions but are the point of contact for representatives from graduate and professional schools when they visit campus. Many institutions also sponsor placement and career days in which many graduate and professional school recruiters are available in person. Since many non-traditional and interdisciplinary students are employed full-time and are rarely on campus during periods when advertising in offices and student newspapers are most available, a good mentor also keeps these opportunities in mind during teaching and counseling situations.

Institutional libraries as well as the Placement Service keep graduate catalogues and a number of professional placement guides which provide a wealth of valuable information on graduate and professional schools. Also prominent are recommendations on financial aid resources, hints on application procedures, and answers to a great number of the questions most frequently asked by prospective graduate students.

These materials would include information on the use of specific admissions examinations such as the GRE, MAT, GMAT, LSAT[5] and others. Similar information is provided on the availability of financial resources, types of aid packages available, dependence on merit or need based aid and the primary needs-analysis procedure used by each institution. It is well documented that lack of sufficient financial aid is one of the most significant problems faced by non-traditional and minority students attending both undergraduate and graduate programs.[6]

A knowledge of the available informational guides by their mentor may save students valuable time which can ill afford to be wasted due to narrow admissions windows at most graduate schools. The simple task of finding if a school requires the Graduate and Professional Schools Financial Aid Service form (GAPSFAS) or only accepts the Financial Aid Form (FAF) can save a student valuable time and processing fees when trying to determine a student's need and scholarship potential. Students are spending longer periods of time than ever before to complete their studies due to lack of resources, expansion of academic programs, desire to enroll in classes of personal interest and need to fulfill other desires or responsibilities.[7] This tendency is even more distinct with nontraditional and interdisciplinary students who are often older, come from low-income or multiple employment situations and have greater personal responsibilities. All these situations tend to increase the need for well-formed and frequent advice from a mentor and greater availability of increased financial assistance and of institutional services offered at times convenient for these students.[8]

A number of cities around the country serve as host sites for graduate and professional recruiting forums each year. The forums, attended by in many cases almost 200 graduate, law, business administration and other schools, are held at regular intervals during the fall semester. They are most frequently held on Saturdays to improve accessibility to nontraditional students and provide concurrent special interest sessions in addition to opportunities to talk with institutional representatives. This access to institutions and resource persons during times convenient for nontraditional students should be of special note to mentors and program administrators as they plan their advising schedules.

The euphoria which nontraditional and interdisciplinary students experience when they realize that they can actually gain admission and succeed at baccalaureate education is exhilarating for both the students and their mentors. Yet this excitement need not be dampened when they confront a potential desire for an advanced graduate or professional education. Admission to a graduate program need not be viewed as an impenetrable barrier to further success. Students and mentors have access to a number of resources which will help them not only discover potential institutions which they may never have considered in the past but also reveal a wealth of potential resources and information on procedural concerns.

There are mechanisms for additional success for these students. This success can be made much easier if program advisors and mentors take the time to familiarize themselves with a few of the available resources, thereby saving their students valuable time and energy. This is one of the most important tasks which mentors may accomplish in our work with these students. We not only instill in them a sense of academic self worth, but also of academic honesty and the concept that they can succeed in the academy with hard work and by taking the initiative to seek out sources of information and inspiration to further their careers and their lives.

Endnotes

1. National Center for Education Statistics, Digest of Education Statistics, 1989, (Washington, D.C.: Government Printing Office, 1989), 169.

2. Beverly T. Watkins, "Growing Number of Older Students Stirs Professors to Alter Teaching Styles." The Chronicle of Higher Education, 1 August, 1990, A1 and A12.

3. Billy O. Wireman, "A Liberal Education is the Best Preparation for Change." Higher Education and National Affairs, 14 January, 1991, 5.

4. While there are a great number of graduate and professional guides available, the following are a few examples of professional publications and data bases to which students and mentors may refer for information on graduate and professional programs.

American College Testing (ACT) DISCOVER program is a computer-based career planning system which provides information on graduate programs and schools. (Iowa City, IA)

The Guidance Information System (GIS) is a computer-based information resource on colleges, programs, and occupations produced by the Houghton Mifflin Company. (Cambridge, MA)

The Graduate School Guide is a publication listing institutions and graduate degree programs by geographical regions of the country. (Mt. Vernon, NY)

Directory of Graduate Programs is a publication of graduate institutions by academic discipline providing information on cost, prerequisites, financial aid and more. Sponsored by the Graduate Record Examination Board and Council of Graduate Schools and published by the Educational Testing Service. (Princeton, NJ)

Graduate and Professional Programs provides academic profiles of graduate institutions by academic disciplines and geographic region as well as other useful information for prospective students. Published by Peterson's Guides. (Princeton, NJ)

5. Graduate Record Examination (GRE), Miller Analogies Test (MAT), Graduate Management Admissions Test (GMAT), and Law School Admissions Test (LSAT) are prominent entrance examinations used by many graduate and professional institutions at which interdisciplinary students may seek enrollment.

6. Eileen M. O'Brien, "Continuing Ed. Programs Not Reaching Minority Populations, Officials Admit." Black Issues in Higher Education. 1 March 1990, 7.

7. Amy Goldstein, "The Student Stretch." The Washington Post. 19 March 1991, A-1.

8. Eileen M. O'Brien, "Financial Aid Biggest Obstacle to Continuing Education's Minority Recruitment." Black Issues in Higher Education. 1 March 1990, 7.

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COMPLIANCE OR COMMITMENT: INSTITUTIONAL IMPACTS OF STATE INCENTIVES TO IMPROVE MINORITY STUDENT PARTICIPATION AND SUCCESS

Susan Martin Studds

Introduction

Issues of equity and diversity have moved into the mainstream of research and practice in higher education. The importance of increasing minority student participation and success in higher education seems unquestionable, both in terms of justice and equality and enlightened self-interest.

Although research has long identified the importance of institutional change in addressing differences in achievement between minority and majority students, (Crossland, 1971; Peterson, 1978; Thomas, 1981; Wright, 1987; Richardson and Skinner, 1989), little effort has been made to assess institutional changes that have occurred as a result of special programs to improve minority student recruitment and retention. This study sought to determine the type and level of institutional change that has occurred in three Virginia institutions as a result of state incentive and categorical funding to improve minority student recruitment and retention through the Virginia Student Retention Program (formerly the Funds for Excellence Subprogram) and the Virginia Student Transition Program (VSTP).

Understanding how change occurs and how policy affects that change can aid in the development and implementation of policies that can help institutions facilitate minority student success.

Theoretical Framework

Kotter, Schlesinger, and Sathe (1979) identify a continuum of strategies managers might use in introducing organizational change. Changes range from an immediate and often short-lived response to a problem (compliance) to longer term developmental change (commitment) which evolves as institutions plan for the future. The type of change strategy used depends on how much change needs to be brought about, the amount of time and resources available to implement the change, and the amount of resistance to the change that can be anticipated. Although the

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theory does not place value on either end of the continuum, developmental change is indicative of the commitment necessary for minority student success. The theory of problem-solving and developmental change relies on timing, involvement, and resistance -- all important variables in implementing desegregation plans in Virginia.

According to recent research by Richardson (1988) and colleagues, (Richardson and de los Santos, 1987; Richardson, Simmons, and de los Santos, 1987; Richardson and Skinner, 1989) higher education institutions go through a developmental change process in adapting to a conflict between access and quality brought about by an increased presence of minority students. "The process of adaptation begins after administrative strategies adopted in response to external pressures for greater access produce mismatches between the press of an institutional environment and the capabilities and preferences of a new student clientele" (Richardson & Skinner, 1988, p. 5). This process begins with the elimination of admission barriers and increased recruitment of minority students. Early interventions include programs and services which do not alter institutional norms. As they move through the process, institutions begin to plan strategically to provide minority students with a fair opportunity to graduate. Emphasis is still on adjusting the student to the environment through special services, but they are better planned, more comprehensive, and centrally coordinated. Ultimately, the programs become systemized until a level of institutional transformation is reached. At this level the institution has undergone fundamental change which alters the learning environment and acknowledges the contribution of diverse students who are seen as important to the institution rather than as a threat to quality (Richardson, 1988). Movement through the process can be summarized as going from compliance to commitment.

Program Description

The Virginia Student Retention Program was established to facilitate imaginative "other race" student recruitment and retention projects at Virginia colleges and universities. [In Virginia desegregation cases "other race" refers to black students at historically white institutions and white students at historically black institutions.] Funding is provided by the state to allow initiation of projects with the expectation that successful programs will be continued with institutional or external funding.

For the most part, programs have been continued, even after Council funding ended. Eighty-five percent of the programs funded between 1983 and 1989 continue to exist. Of the 15 percent that were terminated, lack of institutional funding was the major reason for discontinuation, followed by insufficient minority student population, change in institutional priorities, and achievement of institutional enrollment objectives or program goals (Salzberg, 1989).

Methodology

Through case study analysis on three campuses the research tries to determine whether the Virginia Student Retention Program, and to a lesser extent the Student Transition Program, facilitated change in Virginia's campuses, what change strategies were facilitative of change (Kotter, Schlesinger, and Sathe's problem-solving and developmental change theory), and what level of institutional adaptation to the presence of minority students has been achieved (Richardson model).

Underlying the study is the assumption that organizational change is dependent upon certain factors such as level of intervention, number of participants in the intervention, possible resistance to the intervention, and type of funding mechanism. Analysis of institutional change considered institutionalization of projects or parts of projects including:

-incorporating projects or parts into the base budget,
-involvement of more than just the initiators in project implementation,
-allowance of release time for implementors.
-funding of new positions.

Data Sources

Data were collected during fall semester, 1989 through on-site interviews at the state level and at three public universities with differing missions: a rural comprehensive university (CU), an urban research university (RU), and a research university with highly selective admissions (SU). Institutional identities have been omitted to protect confidentiality.

Results

Comprehensive University

Following the Civil Rights era but prior to 1974, Comprehensive University began admitting black students under the same criteria as whites. In 1973 the first black admissions counselor was hired, but it was not until the initiation of the Virginia Student Transition Program (VSTP) in 1983 that the university made any real efforts to recruit black students. Through the Transition Program the university offered a summer enrichment program prior to the freshman year for students admitted under criteria which accommodated academic disadvantages. State categorical funding was instrumental at CU in opening access and beginning the change process.

In 1985, in response to high attrition of students admitted through the VSTP CU began participating in the Virginia Student Retention Program. The state funded the program at decreasing levels for three years with the university covering the balance needed to provide retention services primarily through a "second summer program". Two new positions were added and the program continued with full university funding beginning in 1989. The Retention Program allowed CU to progress according to the Richardson model with the establishment of programs to facilitate minority student achievement.

In 1989 CU received incentive funds to establish a Faculty Mentorship program, possibly an initial effort to further facilitate organizational change. Because there are so few minority faculty members at CU, most participants in the Mentorship Program are white, enabling the retention program to move into the mainstream of university life.

The state funded programs did promote institutional change at CU in terms of institutionalization of programs and funding of new positions. The programs enjoy top administrative support as well as broad participation by faculty and administrators, especially in the Faculty Mentorship Program. Although resistance to minority student achievement is not a widely held viewpoint, CU has experienced one or two racist incidents attributed to possible resentment of special programs directed at a specific sub-population of students.

Research University

As early as 1969 the black student population at RU was 10%. In 1972 the first program to recruit minority students who did not meet admissions criteria was established to provide summer academic support. The program was initially funded by the university, then received federal funding for a time. In 1978 the university began picking up funding of the program because federal guidelines for participation were too restrictive, and by 1983 it was fully funded by RU. It was suggested that RU's decision to fund the program launched it into the mainstream of institutional activities and priorities and kept it from being peripheral. Before state incentive funding was initiated, RU had already begun the change process by providing academic support to facilitate student participation and success.

In 1983 RU received its first Virginia Student Retention Program grant and in 1984 participation in the Student Transition Program was begun. The first two Retention Program grants were initiated by academic divisions to increase minority participation in specific fields. In 1986 RU, used the Student Retention Program, to initiate Adopt-A-School, one of the first programs in the state to reach into the public school system to provide opportunities for younger students. This was the only project at RU to receive Retention Program grant monies for more than one year. The next state funded program was initiated by a faculty member to diversify the curriculum in RU's Orientation course. In 1989 the state funded another public school outreach program, Project BEST. None of the projects at RU which were established with state incentive funds were continued after state funding was terminated.

Institutional change in terms of institutionalization of state funded programs, increased staff, or new funding was not observed at Research University. Few people were involved in the initiation and implementation of Student Retention Program projects with the exception of project BEST. It remains to be seen whether the institution will pick up support of project BEST after state funding is terminated, but the institution did promise in its proposal to see to it that the program continued. Organizational change at RU was on a micro-level rather than institution-wide, and included curricular changes and new recruitment efforts targeted at local high school students or for specific programs. There was no indication of resistance to any of the projects at Research University.

Selective University

The first black undergraduate was admitted at Selective University in 1966 but by 1971 there were still fewer than 30 black students enrolled. Admissions efforts increased and an Associate Dean of Students for Minority Affairs was hired, but retention of black students continued to challenge the university. In 1979 SU initiated STEP (Summer Transition and Enrichment Program) to help minority students adjust to the predominantly white campus.

Selective University received state incentive funds for STEP in 1983 and changed the timing from a pre-freshman program to one targeted at rising high school seniors. The Student Transition Program provided summer support to new freshmen. STEP was partially funded by the state for three years and has continued since then with institutional support. In 1986 SU received funding for CHAMP (Creating Higher Aspirations and Motivation Program) a program targeted at 9th graders. The intention was to provide a full range of support from 9th grade through college, however state funding was discontinued after the first year and the CHAMP program was terminated. Both CHAMP and STEP, as well as the Student Transition Program are run by a centralized Office of Minority Student Affairs at SU. The dean in that office who was responsible for the initiation of STEP and CHAMP indicated that her office would not be submitting another proposal for state incentive funding because the small fiscal award did not justify the work involved or have sufficient institutional impact.

Following three years of non-participation in the state programs, a group of professional school faculty members and administrators established a program whose purposes were to enhance the university's ability to attract and retain graduate students, a population not typically served by the Virginia Student Retention Program. Not only are new segments of the student population served by the program, but faculty members and administrators not previously involved in the mainstream of minority student activities have been instrumental in getting the program started. While there has been little resistance to the program on campus, the local press has charged that differentiated admissions standards and academic support are unnecessary in graduate and professional programs. This was the only open resistance to a program observed in any of the institutions.

Although there had been institutional activity to improve the recruitment and retention of minority students prior to the state incentive and categorical programs, state funding did result in change as illustrated by institutionalization of STEP and participation of faculty and administrators not involved in the initiation of the program. The latest Retention Program grant has enabled a new group of faculty and administrators to become involved in minority student access and retention.

Analysis

The state funded Student Transition Program and Virginia Student Retention Program did help Comprehensive University move through the Richardson model by facilitating admissions and student success. The Faculty Mentorship program provides evidence of commitment to broadening student participation, however CU showed no indication that it was redefining quality in terms of minority student participation. In fact, improvement in GPA and SAT scores was mentioned as a sign that CU was improving in quality overall.

Although state funded programs have helped RU advance in facilitation of minority student success, the primary efforts are located in the Office of Minority Concerns which has never been part of either the Virginia Student Retention or Transition Programs. A possible explanation of the limited impact of state funded programs is the small size of grants and decentralized administration of programs. RU's commitment to increase minority student success was evident prior to the initiation of state funding programs.

Selective University's commitment to minority student success was also evident before the state funding programs began, having initiated comprehensive minority student success programs prior to 1983. The initiation of CHAMP showed institutional recognition of the importance of early intervention and the connection between elementary/secondary and higher education.

The Virginia Student Retention program has facilitated change on all three campuses, with the most significant change at CU, followed by SU and then RU. At CU and SU programs were administered centrally and funded by the state beyond the initial year. At RU projects were initiated by faculty and although projects were submitted every year, only one project received multiple year funding. Changes attributable to incentives included increased enrollment (CU and SU) and participation in campus activities (all three campuses) by minority students. A new office was established and staffed at CU and all three campuses enjoyed top administrative support for minority student recruitment and retention programs. At two campuses (RU and CU) mention was made of the full participation of minority students in all aspects of campus life. At SU minority students were described as "more similar to majority students than different from them".

These changes are indicative of institutional commitment to minority student success and institutional change. They illustrate movement through the Richardson model and represent real efforts to improve both recruitment and retention of minority students.

Limitations to campus change were attributed to the limited size of awards and the one year funding cycle. It was acknowledged that larger issues of campus climate, are not likely to be solved by "simply throwing money at them". Changes that would move institutions to provide real equal opportunity are unlikely to be facilitated through projects initiated through external incentive and categorical programs.

Conclusions

Institutional change as measured by institutionalization of projects, incorporation into base budgets, release time, and new hires was observed in two of the three institutions. It appears this developmental change was related to centralized administration of projects and support of top administration. This confirms earlier research in terms of the importance of leadership, but contradicts other studies which indicated that decentralized administration is more likely to lead to long-term change.

According to respondents at both the state and institutional level, incentives were preferable to mandates or unfunded attempts to establish goals and priorities. Particularly where autonomy and diversity are valued, incentives enabled individual institutions or project directors to design programs that met unique needs and situations. Although the literature on incentives leans toward using them for short-term projects or goals, projects funded through the Virginia Student Retention Program at two of the three institutions have become institutionalized and indications are that the institutional change will be long term. Change appears most likely when external funding is provided over several years and is sufficient to cover program costs.

Although some progress has been made to improve the success of Virginia's minority students, further effort on the part of both the state and the institutions will be necessary to provide an environment that insures equal opportunity for all students. As programs become institutionalized, the impact on student success will need to be measured to insure that the goals are being carried out.

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ASSURING ACADEMIC QUALITY IN NONTRADITIONAL PROGRAMS

IMPROVING TEACHING: A DEPARTMENTAL APPROACH

Raymond W. Campbell

Introduction

Higher education faces an uncertain future because of the declining number of traditional-age students, competition for dwindling resources and limited job mobility for faculty (Chabotar & Honan, 1990). Many colleges and universities are already struggling to balance budgets, stabilize enrollments and maintain positive public images.

In the report Scholarship Reconsidered: Priorities of the Professoriate, Ernest Boyer (Leatherman, 1990), president of the Carnegie Foundation for the Advancement of Teaching, expressed what seems to be a commonly held belief that the emphasis on research at many institutions has contributed to the serious neglect of teaching. To address this imbalance, research institutions like Stanford University (1991) have begun to develop plans to elevate the status of teaching. This type of action suggests that instructional development activities could assume an increasingly important role in the 1990s. Without adequate teaching improvement activities and appropriate incentives, faculty attention to effective teaching could translate very easily into a loss of faculty enthusiasm and commitment and institutional stagnation.

In addition to the economic slowdown and the shift in demographics, many institutions are plagued by internal problems. More than half of American college and university full-time faculty members are between forty-five and sixty-four years old, and older faculty members have tenure (Schaie, 1990). Anxiety over faculty morale and institutional loyalty has increased on many of these campuses (Zemsky & Massy, 1990).

Today's faculty has changed in three other respects: it includes more females, more ethnic minorities and more part-timers. It has lost much ofits homogeneity and perhaps even its identity. This increasingly diverse faculty is then challenged to teach an ever more heterogeneous student body (Wegner, 1990). In short, the traditional mix of faculty and students is in a state of flux. Consequently, there is a corollary impact on the attitudes and values of faculty members. If there has ever been a need to re-invest in teaching, it is now, in the face of these diverse threats to institutional vitality.

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The instructional improvement program instituted seven years ago in the Department of General Studies of Thomas Jefferson University is one model worthy of consideration in addressing this concern. This paper will provide a rich resource for chairpersons and faculty in understanding how an instructional improvement program can be developed and implemented in a multidisciplinary department that serves both traditional and nontraditional students. The remaining portion of this paper is organized in three sections: Instructional Improvement Program, Future Directions and Conclusion.

Instructional Improvement Program

Steps to establish the instructional improvement program in the Department of General Studies were initiated by its chairperson. He was inspired to establish a departmentally-based and systematic approach to the improvement of college teaching by the myriad factors described in the introduction. In particular, he was motivated by his observations of the limitations in teaching strategies that faculty members possessed for teaching a diverse student body. Because the chairperson was interested in developing a comprehensive program for improving teaching effectiveness, a wide-ranging set of activities was established. While these activities are not unique, the atmosphere of trust and genuineness in which they are carried out encourages faculty to acquire the knowledge and skills they need to become better teachers.

A Departmental Perspective

The development of a departmental perspective on effective teaching begins at the time of the employment interview. The chairperson sets the tone for teaching as a major priority by stressing the importance of effective teaching to the institution's mission. This emphasis is further reinforced by the requirement that prospective faculty candidates provide evidence of their teaching effectiveness as well as a history of the courses they have previously taught. Once hired, faculty are provided with a teaching guide that documents the responsibilities and expectations for teachers in the department.

Special attention--in the guide and in the utterances of the chairperson--is paid to the preparation of the syllabus and the full utilization of time during each class meeting. The chairperson encourages faculty to follow a particular syllabus design that includes the following key components: course number, title and section; academic credits; time and place of class meeting; instructor's name; required textbooks; official course description; course objectives; evaluation and grading; academic policies; date-by-date list of assignments and recommended readings (if any). Beginning with the first class meeting of their first course, professors are expected to begin and end their classes on time, meet in their regularly scheduled classrooms, and teach for the entire period. For example, after discussing the syllabus and other course-related matters at the first class meeting, faculty are expected to teach during any remaining time and not subscribe to an early release. As a whole, these initial steps serve to establish a strong sense of accountability in the teaching-learning process.

Teaching Portfolios

To encourage faculty in their pursuit of quality teaching, a separate teaching portfolio is established for each of them. The teaching portfolio consists of two folders, A and B. Folder A contains the following types of materials: contracts, employment history, official transcripts, curriculum vitae, individual consultation memoranda, class visit reports, evaluations of instruction by students, and correspondence (e.g., faculty achievements/accomplishments, faculty promotion applications, thank you letters, etc.) Folder B is reserved for course-related materials (syllabi, handouts and examinations). Faculty are expected to turn in copies of the latter for every course that they are teaching.

Seminars on Teaching

Annually, the chairperson arranges at least two faculty seminars whereby distinguished faculty and other experts from within or outside the university present their views on selected topics related to the improvement of teaching. Because these meetings are typically open to the entire college community, they bring together new and returning full-time and part-time faculty from across all departments. Following the seminars, the chairperson recognizes the participation of faculty from his department with thank you letters--copies of which are filed in the individual faculty members' teaching portfolios. The general nature of these seminars is both a strength and a weakness. While they appeal to a large number of faculty, they often fail to provide the depth needed by specific professors in specific disciplines.

Dissemination of Information

Another major role played by the chairperson is that of an information officer. He maintains a library on effective teaching, higher education in general, and news about grants and fellowships.

Closely related to the above are his efforts to disseminate information about alternative teaching strategies via special mailings or as part of the classroom observation program (to be discussed below). Information supplied in the latter category is directly related to the improvement of teaching as noted on classroom observation reports.

Classroom Observations

New faculty teaching for the Department of General Studies are visited at least once during their first term of teaching. Returning faculty are visited at least once during the academic year. These visits are conducted by either the chairperson or another faculty member. Faculty are notified two weeks in advance of the scheduled visits to their classes. In the event the scheduled date and time is unsuitable (e.g., because of a guest speaker or examination), the faculty member has the option to call the department's secretary to re-arrange the visit for another time.

At the beginning of an observation, a faculty member is asked to provide the observer with any course materials pertinent to that day's topic(s). Observers usually stay for at least an hour of the class period. Depending on the schedule of a particular course, this hour may represent the full class period or just a fraction of it. Following a class observation, observers' typewritten reports of their findings are mailed to the respective faculty and copies are filed in their teaching portfolios. Faculty are welcomed to respond to their classroom observation reports in writing or in person to the chairperson. A written response received from an individual faculty member is acknowledged by the chairperson and attached to the original report in the respective teaching portfolio.

Individual Consultations

One-on-one consultations with faculty members usually evolve from the classroom observation program. Consultations are typically requested by an individual faculty member after receiving a class visit report which calls for improvement in one or more areas of teaching. Consultations may involve additional visits to the professor's class, interviews with some of his/her students, and review of students' evaluations of the instructor. In these meetings, the chairperson challenges faculty members to begin to examine the assumptions that underlie their teaching. Oftentimes, faculty members begin to realize that their reasons for selecting a particular teaching behavior are not in the best interests of the students.

Evaluation of Instruction

End-of-course evaluation of instruction by students is mandatory in every course. Instructors are also asked to complete an evaluation form in order to compare their perceptions of their teaching effectiveness with those of their students. In the event a faculty member is not satisfied with the departmental instrument, s/he may supplement it with another instrument. To assist faculty in this area, the chairperson maintains an ample supply of other types of forms, many of which are more detailed and diagnostic in nature. The department's instrument is composed of thirteen questions, each with a Likert-type response scale. In addition, there is room for two instructor-designed questions to be added as well as space for students' written comments. The chairman reviews the quantitative summary and all the written comments collected from every section of every course. In returning the quantitative summary and the forms to the faculty, he encloses a cover letter highlighting the constructive and critical scores and comments.

Future Directions

Over the years, the instructional improvement program described above has done much to enhance the importance and effectiveness of teaching within the department. Its time-consuming nature, however, has prompted the chairperson to think seriously about the addition of any new activities in the future. Recognizing that it is now more important than ever to demonstrate the department's concern for teaching, he foresees the program moving in several new directions. Because most of the faculty have fairly substantial teaching portfolios, opportunities now exist for individual faculty to cull through their teaching histories and develop 3-5 year individual teaching improvement plans for themselves. In devising seminars or disseminating teaching-related readings, the chairperson has been chiefly guided by his own critical analysis of the scholarly literature and classroom observation and student evaluation data. In the future, greater effort will be devoted to assessing periodically the instructional needs and aspirations of the faculty through a brief questionnaire. Closely related to this effort, instructional improvement activities will include a strong focus on classroom assessment techniques so that faculty begin actively to investigate whether the students are learning what they (teachers) believe they are teaching in the classroom.

Conclusion

Instructional improvement as an integral responsibility of a department chairperson makes it less likely for this function to be eliminated in a belt-tightening economical environment. In austere times, instructional improvement centers are often one of the first items to experience the red pen of the chief financial officer. Although time-consuming, the chairperson who takes his or her instructional improvement responsibility seriously has an unusual opportunity to contribute to the teaching-learning process. By helping faculty move from that of neophyte teachers to experienced teachers/investigators in their own classrooms, the chairperson empowers professors to be active participants in a process of ongoing improvement. The type of program described in this paper could readily be implemented in any department where there are chairpersons who are willing to devote the time and effort necessary to familiarize themselves with the current theories and research on effective teaching, then willing to blend this research with ongoing classroom assessment techniques, and to challenge and support their faculty to design and commit to their own teaching improvement goals.

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KEEP YOUR FURROWS STRAIGHT: A GUIDE TO ANALYZING QUALITY

Lorraine F. Cecil

Introduction

When I was a child I once spent an afternoon watching my father plow. I was mystified because he spent as much time looking backward as he did forward. Finally I asked him why. His answer was very simple; "You must see where you have been and where you are going if you are going to keep your furrows straight." He was convinced that North Dakota wheat could not and would not grow in a field with crooked furrows.

Educational providers and plowmen have much in common. They need to prepare the ground, plant the seed, and harvest the crop. If they have a good crop, they repeat the process; if it is a failure, or partly successful, they need to find out why. They need to watch where they have been and where they are going; straight furrows simplify the job and provide tangible evidence of care in preparing the seed-bed.

This study deals with the on-going attempts of the Bemidji State University External Studies Program to measure where we have been and where we are going. It will include discussions of grade comparisons between on and off campus students as well as subjective information drawn from faculty and student questionnaires. Continuing attempts to analyze factors contributing to lack of success will also be included. This program has touched the lives of close to eight thousand students since its inception in 1973. A number of studies have been developed and analyzed in that time, all of which have contributed to greater understanding of its strengths and weaknesses. These latest efforts are both more focused and more far-ranging. One might say that they look at the seed-bed and the harvest. In other words they will provide concrete evidence as to whether our furrows are indeed straight.

Comparison of Grades

One of the ways of measuring success for External Studies students is to compare their grades to those earned by on campus students; this approach analyzes the harvest, a task not lightly undertaken. To be valid, there must be more similarities than differences. Not all classes

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are available through External Studies and not all instructors, even in participating departments, are involved. This means that the instructors will not necessarily be the same. Furthermore the textbooks and syllabi will nearly always be different and the comparison will not be entirely valid. It is being done, however, because comparing grades is one of the means which faculty, and sometimes students, use to judge the effectiveness of the External Studies Program.

Seventeen classes were selected; one was chosen from science, two from humanities, one from physical education, one from recreation, one from health and eleven from social science. While there was an attempt to provide some diversity, these classes always draw well both on and off campus. It would seem reasonable that a representative cross section of the two student populations would be included. The study was concerned only with those who completed the class with A, B, or C; it was not concerned with those who withdrew, or received D's or failing grades. (Another study, currently underway will consider these factors.)

When all the grades were considered, on campus students fared better than External Studies students in 11 classes (See Table I); External Studies students were ahead in four classes and the results were about the same, or neutral in two. Interestingly enough, when only the A's and B's were considered, External Studies students were better in nine classes, and about the same in five, with on campus students running ahead in only three. While this is not a direct reversal, it comes close.

These figures suggest that a closer look should be taken. First of all, it is important to realize that the difference in numbers is significant; for that reason percentages are much more meaningful than numbers themselves. Yet, because the numbers are small, the percentages can be somewhat misleading. One or two students can then make a disproportionate difference. Even with all of these caveats, the figures are still helpful.

And what does a closer look reveal? It reveals that a shift occurred in 11 of the 17 classes. The four classes in which External Studies fared better with all three grades included were Physical Science, Introduction to Political Science, General Psychology I and II. When C's were eliminated, Psychology I and II moved to the neutral category and U.S. History and Life moved from neutral to External Studies superiority. The on campus superior group lost all but three classes--Recreational Leadership, Becoming Human, and Jogging and Conditioning. Nutrition and Judicial Process became neutral and English 123, Physical Geography, 20th Century U.S. History, Social Statistics, Corrections, and Ethics moved to External Studies superiority.

Such upheaval causes one to look long and hard at the C range. Removing C's from consideration, tilts the scales heavily in favor of External Studies. Does this mean External Studies students are always superior? Often Superior? Does it merely mean that we do indeed need to complete a study which will extend the comparison across the entire range.

If External Studies students persistently rank higher than on campus students the new study will continue to show a fall-off in the medium and lower ranges. Right now it is evident that the External Studies student is indeed a very capable, highly motivated student. But in none of these classes do all of the percentages add up to 100%. This means that a percentage of the students in each class, on campus or External Studies, are not included in the A, B, C range. Any complete study of grades must also consider these results. The analysis must examine not only what the grades are, but how they were assigned; i.e., did a student receive an E or get an I which eventually become an E. Analyzing a harvest includes many factors, including yield, grade, moisture content and color. Careful farmers are concerned about all of them since they all impact upon his market price. They need to know what happened and why. Educators too must do more than look at only a few grades to analyze the effectiveness of a given program.

Faculty Response

Faculty cooperation is essential to any program such as this; so is their understanding of student profiles. One way of measuring their perceptions is through a questionnaire which asks them to compare the two groups of students as well as to draw several inferences regarding student preparation, and progress as well as methodology used. (See Table II). These questionnaires were sent to the instructors of the classes chosen for grade analysis. The majority of the instructors contacted did respond, thus providing an analysis of the seed-bed.

Most of these instructors had very positive feelings about External Studies students. Most of them felt that these students were more highly motivated than those on campus even though they felt that they had more obstacles to success than on campus students. They also felt that they spent about the right amount of time studying.

Instructors were also asked about how they teach the External Studies classes compared to those taught on campus. Most of them use different texts and syllabi; the rationale is that the text must be more complete since students will not be attending lectures and the syllabus, of course, is built around the text. Exams were sometimes quite different and sometimes about the same; in fact there was no real consensus. The most interesting question to the coordinator was whether or not these students were held to the same standard/curve. Most instructors indicated that this was indeed the case with only two indicating that their standards were different.

Instructors were also asked to analyze their time commitments. While results were fairly evenly divided, more time involvement from faculty appears to be likely.

Satisfaction with his/her own performance varied but most instructors indicated "somewhat satisfied" rather than "completely satisfied". They also felt, nearly unanimously, that they had provided an adequate means of communication with the off-campus students.

Analyzing these results is beneficial to the Coordinator and to the faculty involved. Since all evaluations are somewhat subjective, it is useful to know whether faculty have preconceived perceptions or whether they provide mechanisms to treat students objectively. Some faculty indicated that they had some unresolved problems. (Those faculty who were involved in an earlier survey now appear to have resolved some of their problems). Several of the respondents appeared interested in seeing the results of the survey; only a faculty member who is actively "engaged" in teaching students on or off campus is willing to modify approach or materials if necessary. These results indicated an interested, involved group, the only kind who can make such a program work.

Student Evaluations

Another method which can be used to determine whether or not a program is properly organized is to ask students for an evaluation. A student advisory committee asked the External Studies office to provide a formal means for feedback. They felt that it might help to root out problems which are slow to come to light through informal channels and provide an analysis of the processes in use.

An evaluation form was designed which incorporated five areas--instructors, course requirements, course contents, student self evaluation and delivery methods--and is distributed with every syllabus. (See Table III). Thus a student who took three classes is given a form for each class he registers for. This process has been in effect since Fall Quarter 1990 so there have only been two reporting periods to date. The response rate was approximately 19% for Fall Quarter and appears to be even lower for winter, although there will undoubtedly be more trickling in.

Even though students have not been quick to respond, there is some real value in their responses. One can hypothesize that those who are very, very pleased or unhappy will be the ones more likely to respond. All evaluations come to the Coordinator where they are scrutinized and tabulated; they are then sent to the faculty members for their own use. It is interesting to note that there are some discrepancies in the two quarters. They may or may not be significant and may be determined by which classes are taken rather than anything else. Instructors generally received high marks from the students especially in efforts at developing a syllabus. Winter Quarter respondents believed the efforts were excellent and Fall Quarter respondents felt they were above average. Faculty were rated average or above average in anticipating learning and expectations regarding time. Returning work to students drew mixed reviews with Winter Quarter respondents feeling more satisfied.

The section dealing with requirements showed several reactions both quarters. Choice of texts was rated average to excellent as were instructions to students, assignments, and supplements/AV materials; higher ratings came from winter quarter. Test questions themselves were rated generally average to above average as were tests as a means of teaching. The way in which course requirements were laid out was generally regarded as average by Fall Quarter students and excellent by Winter Quarter students.

In terms of content the students were nearer in agreement. The proper amount of credit for the work done was rated as average by both groups. Both agreed that the subject matter itself was above average. They parted ways, however, concerning intellectual organization of the course; Fall Quarter respondents felt that their stimulation was mostly average, While Winter Quarter respondents felt it was above average.

It is always interesting to note how students perceive their own efforts. Both groups felt that they made above average efforts. Average efforts were a close second to Fall Quarter students while Winter Quarter students indicated both excellent and average efforts. Most of the fall group felt that the quality of their work was average while most of the winter group felt their work was above average. In terms of estimating the knowledge gained from the course, the bulk of both groups rated themselves as above average. It is very good news indeed that they feel they can and do learn more than average through these classes. (I intend to ask faculty to check these responses with the student's grade to see how accurately they see themselves).

The section on delivery concerns is a very crucial part of the questionnaires since this is really the crux of the entire program. While there are some difference in their views, for the most part they agree. The Fall Quarter group felt that the difficulty of the classes is about the same as on campus, but there were nearly as many who felt they are more difficult. The Winter Quarter group felt that External Studies classes are more difficult while a significant number who felt that the difficulty is about the same. Both agreed that they learned as much as in a classroom setting with nearly half that number feeling they learned more than they would have in a classroom setting. There were also a few more in Fall Quarter, who felt that they learned less. All agreed that they had to rely more on themselves. In terms of how long they will remember what they learned, the majority in both groups felt that they would remember it longer but almost as many in each case felt that they would remember it about the same length of time.

Looking at the results of the survey is heartening. Students generally were positive in their responses. The fact that their answers to several questions varied, seems to indicate that they read and responded tc each question. One can hope that reading such a questionnaire, even if it is not answered may make students more aware of course organization and their own responsibility. They tell us where we have been; they tell us where we are going.

Other Strategies

Still others methods of analyzing and enhancing the program have been used with varying success. Informal feedback has been a factor since the beginning. It may be a letter, a phone call or a remark; it may be directed to the coordinator, to a faculty member or a member of the administration. Whatever it is, it is recorded and shared. It has been the basis of many, many positive changes.

Ceremonials have also helped to focus attention on the program and make students feel more collegial. Commencement has been promoted as an experience one cannot miss. In the early days of the program, the External Studies Office collected the money for renting caps and gowns and distributed them graduation day. Since commencement is no longer on a Sunday, students can get to the bookstore to do this for themselves. The Records Office now sends them all of the same information as on campus students receive. Every attempt is made to send commencement programs to students who cannot attend so they will have a souvenir. Students at the Arrowhead University Center, located 100 miles from campus, have their own commencement in conjunction with the local community college. There is abundant evidence that these activities not only focus attention on the program but increase enrollment. This is not the same as improving the program, but it is easier to make improvements when prosperity reigns.

Another promising idea is that of setting up study groups. The subject has been brought up off and on for several years and was mentioned again by a student advisory group this fall. They felt it would identify problem areas which needed solutions from the office itself and also that sharing experiences would solve many of the problems. Winter Quarter a query was sent to all students asking if they were interested in such a group. So far the response is almost non-existent, but it is well worth checking again.

All of these methods are relatively unobtrusive. The results will also be unobtrusive; yet it is that kind of information which has often been employed to make the program more responsive to student needs.

Conclusions

The efforts described all deal with attempts to analyze the effectiveness of the External Studies Program. Some have examined the process and some have focused on the end product; metaphorically speaking the seed-bed itself, the planting and harvesting methods and the harvest itself have all been examined. The grade comparisons indicate that External Studies students have a high measure of success; they also point to the need for further study. Faculty responses are generally positive and show a dedication to understanding and serving clientele. Student responses indicate a real awareness of the process, an awareness which is crucial to a successful program. Without it, the best efforts of the External Studies office and the faculty would be meaningless.

No metaphor is perfect, but it can be useful in creating an impression or synthesizing ideas. Metaphorically speaking, the results of this study suggest that the straighter and easier to follow furrows do indeed yield the richer harvest.

Table I

Grades and Percentages Earned in Selected Classes On-Campus and External Studies 1989-1990

	A		B		C			
	C	EST	C	EST	C	EST	C	EST
	# %	# %	# %	# %	# %	# %	Total #	
PSNS III	36/12	4/44	42/14	4/44	70/23	0/0	298	9
Freshman Eng. III	152/17	4/12	314/36	14/45	30/34	7/22	909	31
Physical Geog.	21/15	0/0	40/30	4/50	49/37	2/25	132	8
Intro. Pol. Sci.	16/15	1/20	27/25	2/40	36/33	2/40	106	5
Psychology I	85/08	1/03	204/21	8/28	354/37	13/46	949	28
Psychology II	35/07	0/0	89/19	5/26	167/37	11/57	447	19
US Hist. & Life	23/08	0/0	58/21	3/50	96/35	1/16	274	6
20th Century US	9/11	5/83	19/23	1/16	31/38	0/0	81	6
Social Stats.	14/14	3/25	48/50	5/41	25/26	0/0	95	12
Nutrition	4/11	7/25	13/38	6/22	12/35	5/18	34	27
Recreation Leader.	5/26	1/10	11/57	4/40	1/05	0/0	19	10
Ethics	18/20	4/09	19/22	19/46	27/31	9/21	83	41
Jogging & Cond.	69/81	7/25	4/04	11/39	11/01	2/06	85	28
Intro. to Soc. Wk.	16/18	1/05	38/43	9/52	25/28	5/20	87	17
Judicial Processs	3/05	2/16	24/47	4/33	16/31	2/16	51	12
Correctional Proc.	12/16	2/18	26/34	4/36	18/21	1/09	75	11
Becoming Human	29/10	1/05	60/21	3/15	75/27	5/26	273	19

Table II

EXTERNAL STUDIES
INSTRUCTOR QUESTIONNAIRE

______ 1. The off-campus students seem to be (a) more (b) less motivated than those on campus. Comments:

______ 2. The off-campus students (a) do (b) do not seem to have more obstacles to academic success. Comments:

______ 3. It seems to me that the off-campus students spent (a) about the right amount of (b) to little (c) too much time preparing for this course. Comments:

______ 4. I use (a) the same (b) about the same (c) entirely different texts for the off-campus class. Comments:

______ 5. I use (a) the same (b) about the same (c) entirely different exams for the off-campus class. Comments:

______ 6. I use (a) the same (b) about the same (c) entirely different standard curve for this class on and off campus. Comments:

______ 7. I feel that I spend (a) about the same amount (b) less time (c) more time preparing for and evaluating the off-campus class. Comments: (An "average" size class can be determined by the number you have in your on-campus classes.)

______ 8. Overall, I am (a) very satisfied (b) somewhat satisfied) (c) unsatisfied with the student performance of the off-campus students. Comments:

______ 9. Overall, I am (a) very satisfied (b) somewhat satisfied (c) unsatisfied with my performance in the off-campus classes. Comments:

______ 10. I feel that I have set up (a) adequate (b) inadequate means of communication with the off-campus student. Comments.

Table III

Evaluation Form for External Studies Classes

Instructor's Name   Year   Quarter   Department   Course Title & #

Please answer the following questions by circling the appropriate letter. Then return the form marked "CONFIDENTIAL" to:

The Coordinator of External Studies
Bemidji State University
1500 Birchmont Drive NE #27
Bemidji, MN 56601-2699

CODE

E - Excellent   AA - Above Average   A - Average   BA - Below Average
P - Poor   DNA - Does Not Apply

I. Instructor

A. The effort the instructor appears to have put into developing a syllabus/package was:
E   AA   A   BA   P   DNA

B. The Instructor's ability to have anticipated what students can learn from the course is:
E   AA   A   BA   P   DNA

C. Considering the fact that about three hours of effort/study/writing per week for each credit is considered normal, the instructor's expectations are:
E   AA   A   BA   P   DNA

D. The instructor's response in using a reasonable period of time in grading work and returning results was:
E   AA   A   BA   P   DNA

E. The instructor's response to my unusual circumstances was:
E   AA   A   BA   P   DNA

II. Requirements

A. The text with respect to course objectives was:
E AA A BA P DNA

B. The instructions concerning your responsibility in completing the class were:
E AA A BA P DNA

C. The assignments themselves with respect to course objectives were:
E AA A BA P DNA

D. The supplements, audio or visual materials and others were:
E AA A BA P DNA

E. The test questions as they measured course objectives were:
E AA A BA P DNA

F. The tests as a means of teaching as well as measuring were:
E AA A BA P DNA

G. The way in which course requirements were laid out was:
E AA A BA P DNA

III. Content

A. Considering the credit for the course the work load was:
E AA A BA P DNA

B. The subject matter itself was:
E AA A BA P DNA

C. Intellectually the course was organized in such a way that the way in which I was stimulated was:
E AA A BA P DNA

IV. Student Self-Evaluation

A. The effort I put into this course was:
E AA A BA P DNA

B. The quality of my work for this class was:
E AA A BA P DNA

C. The knowledge I acquired from the course was:
E AA A BA P DNA

V. Delivery Concerns (circle the right letter)

A. The method of study is (a) more difficult (b) less difficult (c) about the same as for a class taken in a classroom setting

B. I found that I (a) learned more (b) learned as much (c) learned less than in a classroom setting

C. I found that I (a) needed to rely more on myself (b) did not rely more on myself (c) relied on myself as much or little as in a classroom setting

D. I feel that I will remember what I learned (a) longer (b) shorter Period (c) about the same as in a classroom setting

Thank you for your cooperation in filling out and returning this form. Please use this space for other general comments concerning the course, instructor or program. Signing your name is optional, but your comments have more weight if your name is included.

____
Name

Other Comments:

INSTITUTIONAL EFFECTIVENESS:
ACCOUNTABILITY THROUGH AN ACADEMIC QUALITY CONTROL SYSTEM

Donald B. Clardy
Jan M. Asnicar

Accountability is certainly not a new word to those in higher education. The literature, even as early as the 1970's, clearly reflects that higher educators recognized the need to document the effectiveness of undergraduate and graduate programs. Recently, accrediting standards and public actions indicate that much remains to be done in communicating institutional effectiveness to the outside world. If structured properly, adult education programs may lead institutional efforts to document learning outcomes, undeniably the first step to measuring institutional effectiveness. The authors have more than a decade of implementation experience with an accountability effort that assesses curriculum, instruction, program services, and student achievement. Two broad areas of assessment are included in this paper.

Affective Assessment

One of the most powerful weapons in the adult educator's arsenal is the ability to ask questions about the adult program. There is but one reason to ask for feedback from students, faculty, staff, and significant others: to improve. This process is commonly referred to as affective assessment. Ordinarily, affective assessment is characterized in one of three ways:

1. Unstructured evaluation usually occurs during informal communication between two or more individuals (i.e. class discussion).
2. Directed evaluation normally employs a list of items introduced to an individual or group (i.e. interview).
3. Structured evaluation incorporates a formal instrument administered to an individual or group (i.e. questionnaire).

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The authors recognize the importance of unstructured and directed evaluation but will focus upon structured evaluations for the present discussion. Several relevant questions must be resolved prior to the introduction of structured evaluation instruments.

1. What information needs to be gathered? What specific types of feedback are available?

2. Who is the best source of information? Which group(s) would provide the most meaningful feedback?

3. What is the appropriate setting for gathering the information?

4. How will the responses be gathered, tabulated and summarized?

5. Who will receive summaries of the results and how often will they be shared?

6. Who will be responsible for documenting actions taken as a result of the evaluations?

The authors recommend the use of seven (7) instruments for gathering feedback for affective assessment. These instruments would be indicative of program areas that often "make or break" the adult education undertaking.

1. **Registration Survey**. This instrument is designed to identify the needs and expectations of students entering the program. It asks students to evaluate reasons for choosing the University, professional and personal objectives at the time of enrollment, and skills in a variety of areas. It also solicits demographic information.

2. **Student End-Of-Course Survey**. This instrument, administered at the end of each course, asks students to evaluate performance of the faculty member and quality of the curriculum materials for the course. It also requests evaluation of administrative services utilized during the period.

3. **Faculty End-Of-Course Surveys**. This instrument is completed by the faculty member at the end of each course. It solicits the faculty member's evaluation of both curriculum materials and the students' success with the course.

4. **Student End-Of-Program Evaluation**. This instrument, administered upon completion of the program, asks students to evaluate the overall effectiveness of the program in relation to personal and professional goal attainment. In addition, students are asked to provide feedback about the program design, sequence, and overall consumer satisfaction.

5. **Post-Graduation Survey.** This instrument is mailed annually to all students who have completed the program. The survey asks graduates to evaluate program effectiveness in relation to professional goals and work skills. In addition, it asks graduates for information regarding the publication and implementation of the capstone project, as well as plans for continuing their education. Limited demographic data is solicited as well.

6. **Program Withdrawal Survey.** Students who decide to leave the program are interviewed by the Student Services staff who then complete this form. It asks for an evaluation of the academic and personal reasons for withdrawal and solicits other relevant information.

7. **Library Resources Evaluation.** Students are encouraged to describe and evaluate library services provided by the institution. The instrument is included due to the unique needs for library resources (i.e. electronic searches, loan materials, etc.) by off-campus adult students.

Cognitive Assessment

Cognitive assessment includes the methodologies employed to describe and measure what learners have gained from a course of study. Meaningful assessment begins with statements of specific learning objectives. The most effective assessment programs are built upon sound learning objectives that:

1. Describe an observable behavior by the learner.

2. Concentrate upon ends rather than means.

3. Identify conditions, limitations, and performance levels when relevant.

Cognitive assessment in adult education will be improved by resolving issues related to what, where, why, and when.

1. What facts, meanings, relationships, skills, and competencies are to be measured?

2. Where will the measurement occur? In the classroom? During application at work? During independent study?

3. Why is the assessment included as a part of the learning experience? Is there a need to have norm-referenced or criterion-referenced assessment or both?

4. When should various components of the cognitive assessment program be implemented? Prior to initiation of the learning experience? During the course of study at specific intervals? After completion of the learning experience?

The authors believe that cognitive assessment can be an integral component and valid indicator of institutional effectiveness. In response to those who have offered a "quick-fix" response, course grades do not meet the need to document learning outcomes. There are many adult education programs that measure student academic achievement. One such program employs four (4) techniques for cognitive assessment and documentation:

1. **Course Exams.** Course specific examinations are administered by faculty at the appropriate times during the course. Individual performance on these exams compared with learning objectives/outcomes are considered one method of cognitive assessment as it relates to the classroom experience.

2. **Course Projects.** In addition to exams, many courses include experiences in development of applied projects related to course content. Students generally complete projects during the course and are required to present findings to the larger group. Both written and oral presentations are evaluated by faculty.

3. **Capstone Projects.** In both undergraduate and graduate programs students are required to identify, develop and complete a capstone project. This applied research project is designed to combine academic style (i.e. APA research format) with a "real life" professional issue or problem. This project, upon completion, is presented and defended before faculty, administration, and professional peers.

4. **External Evaluations.** Course exams, course projects, and capstone projects are randomly selected for external evaluation by qualified faculty not directly involved in teaching or administration. These evaluation summaries provide feedback that allows comparisons with other traditional and nontraditional student achievement indicators.

Conclusion

The authors endorse an institutional commitment to assessment. Experience would indicate that assessment is not often a priority until some external force (i.e. accreditation review) magnifies the importance. This is indeed unfortunate but need not be the case for adult education programs. One of the major obstacles to the establishment of accountability measurement in traditional programs is the commitment to longstanding policies and procedures which allow little flexibility. The adult education programs are still at an infancy stage in most institutions. Changes are much more readily implemented. The authors sincerely hope that adult education programs will be able to set the pace for winning the accountability race. Adult education cannot contribute to the quality of the institution unless it is constantly concerned with its own quality.

THE EVOLUTION OF INTEGRATING EVALUATION INTO A COOPERATIVE EDUCATION PROGRAM

Leslie Wilson Hauschildt

Introduction

To paraphrase one of my children's books, it is important to "begin at the beginning." An awareness of Metropolitan State College of Denver and its student body, as well as an understanding of what cooperative education is at MSCD and how it operates, will provide useful background information.

The College and The Program

Metropolitan State College of Denver is an urban institution located in downtown Denver, Colorado. We are a young school, barely 25 years old. We were created by the state legislature to serve the urban population as a baccalaureate degree granting institution. MSCD began as a nontraditional institution in many ways, and we still are today.

Our enrollment is currently over 17,300. The first clue that we are somewhat nontraditional comes when you realize that these 17,000 plus students come out to the equivalent of just over 12,000 FTE. In other words, part-time students are not uncommon at MSCD, rather they are the majority. And this makes sense when you next find out that our average student age is 27.5, that 55% are female, that we have no dorms, and that most of our students work and go to school concurrently.

Cooperative education at MSCD is based on the premise that our philosophy of cooperative education must be as nontraditional as our student body. Just as the college is first and foremost an accredited degree-granting institution, following nationally established accreditation standards, so co-op ed is first and foremost an academics-enhancing program. But just as our student body is not all 18-21 and away from home for the first time, so our definition of cooperative education is not just alternating semesters of school and work - which is the traditional definition of co-op ed. Our definition is, instead, any work experience, related to a student's declared major or minor, which will enhance and expand on that student's body of knowledge related to his or her minor.

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So, although we have students in co-op ed who are traditional students by definition, and who are participating in "traditional" co-op ed, most of our cooperative education students and placements are nontraditional. The majority of our co-op placements are parallel, usually part-time, and most are in the greater metropolitan area.

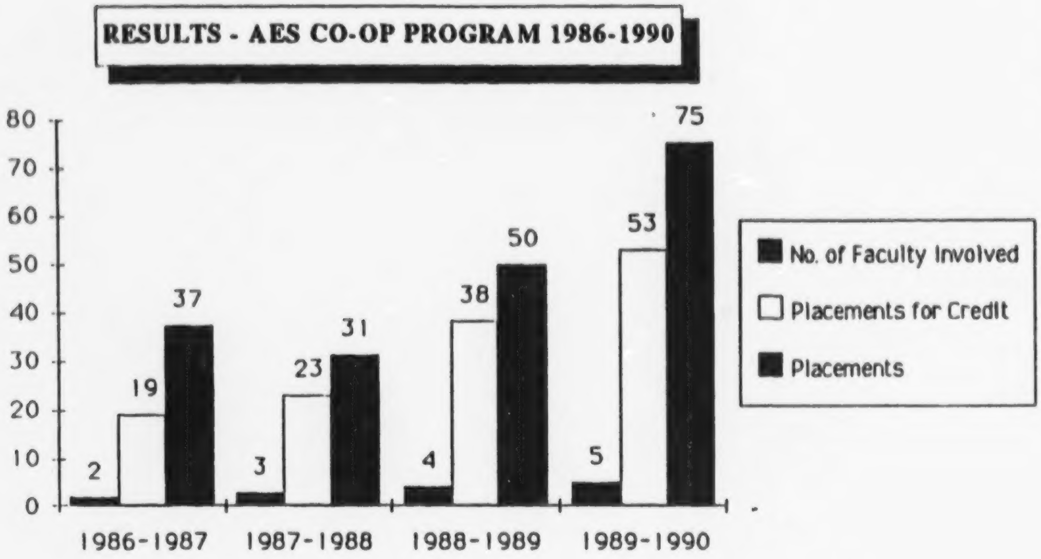
Cooperative education at MSCD is not mandatory, either as a whole institution (like Northeastern University), or within a single department. Although there are some departments what require an internship or practicum before a student can graduate, the co-op ed program's role is to facilitate and help monitor internships and placements, not to take over the individual departments academic judgments about internships.

The Department

I am going to talk about one specific department - the Aerospace Science Department at MSCD. This is a department which does not require internships for graduation. Currently the department has just over 475 declared majors. I work with approximately 175 of these students in cooperative education. The department is split almost 50/50 between traditional-age students and older students, with a gender breakdown of approximately 35% female and 65% male. One of the nontraditional aspects of the department is the targeted focus that most of the students have.

The time period of 1986-1990 is the period in which co-op ed grew dramatically within this department. This growth was, and is, due to a number of factors, and was the basis of a paper that the department chairman, Lt. Robert Mock, and I presented at the 1991 Cooperative Education Association national conference. A portion of that paper dealt with the role that evaluation has had in the growth. Given the nature of Metropolitan State College of Denver's and the Aerospace Science Department's student body, and given the increase in activity, evaluation was an essential part of making sure that adherence to the MSCD philosophy of cooperative education occurred. (Figure 1)

Figure 1



The Evolution of Evaluation

Evaluation has always been an important part of cooperative education at Metropolitan State College of Denver. All co-op ed students are asked to complete written evaluations of their experiences at the end of their first full semester in a co-op placement, as are their supervisors. Additionally there is either a work-site visit or a phone visit made by the co-op coordinator during each student's first semester of placement.

The Aerospace Science Department and myself have agreed that, while this is an excellent basis, for evaluation to truly have the most beneficial impact, there needs to be more. We view evaluation in a broad perspective - that it is not just that which directly reviews co-op activity, but that it is everything which refers to co-op, which will or can affect co-op, or which could be utilized for co-op.

Over the three years of 1987 to 1990, we have planned for and seen the evolution of a more complete evaluation process, one that expands both what is done in an evaluation context, and also who hears this information and has an opportunity to add to it.

In the first year an intensive overview of the year's activity was performed by the department chair and myself, and this has become an annual event. This means more than just tallying the numbers and producing an annual report. Student by student, each placement is looked at in terms of where they were placed, if they received academic credit, what they did for the credit, and what was said about the placement in the written evaluations. Naturally the review for placements with academic credit is more detailed.

In the second year an informal review of co-op activity and brainstorming session with faculty supervising academic credit for co-op was initiated. These sessions now occur once each semester, and have become a very useful sort of unexpected evaluation. Rather than being formally recognized as an evaluation session, it is promoted as a get-together where each faculty person can talk about the special things he or she has done related to co-op ed. Within this setting, reviewing how co-op is monitored and exchanges of ideas on how best to develop good, academically viable co-op placements are goals that are easy to promote and achieve.

In the third year the Industrial Advisory Board was brought into the process. At each of their meetings, co-op ed is an agenda item. In this way the department chair and myself, who are both adjunct members of the Board, are kept abreast of what industry thinks about co-op ed, what the "word on the street" is, if there are any concerns or misconceptions industry has that we need to be aware of, or if there are any issues coming up in the aviation industry that could impact MSCD co-op ed. In this way we get both direct and indirect evaluation of co-op ed.

Immediate Results

The immediate results of the evolution of integrating evaluation into this co-op program have been, as evidenced by Figure 1, the increase in credit production and faculty involvement. The greater level of evaluation provides concrete evidence that the program is academically sound and worthwhile. Additionally, this increased amount of evaluation for co-op ed has correspondingly led to a greater amount of attention, and this has increased co-op's prestige with the faculty. With the enhanced prestige comes a greater faculty willingness to participate in and promote co-op ed. One of the most significant results is that co-op ed is becoming a more integrated part of the aerospace curriculum as a whole, and even promoted as an asset of the MSCD Aerospace Science Department.

The increased faculty participation affirms for the students that their interest in participating in co-op ed as an education activity is justified. And the increase in both faculty and student participation, in addition to the validation that the evaluation processes themselves provide, has led to more employer willingness to be involved.

Long-Term Results

The long-term result of these evaluation processes will be to ensure that the cooperative education program's and the department's efforts stay focused on issues and placements that are academically viable and relevant to students, faculty, and employers - which is the purpose of cooperative education.

Additionally, documenting this evolution of integrating evaluation serves as a model that can be used for cooperative education with other departments, or indeed for any program with an academic connection.

The different kinds of evaluation processes, and the various audiences who interact with these processes in one way or another, are identified in Figure 2. While I don't think you can logically assume that there is an ever-increasing value to more and more evaluation, I think it is evident that there is a clearly beneficial ripple effect in utilizing and integrating evaluation with a "wide-angle" perspective.

Figure 2

Evaluation Functions

A. Placement evaluation form (written by student near end of each semester)

B. Placement evaluation form (written by supervisor near end of each semester)

C. Work-site visit (performed by co-op coordinator midway through first semester)

D. Work-site visit (performed by faculty for credit placements, done with C. above)

E. Annual placement by placement review (performed by co-op coordinator & dept. chair)

F. Informal semester review/brainstorming session (faculty, co-op coordinator, dept. chair)

G. Industrial Advisory Board meetings (IAB members, co-op coordinator, dept. chair)

H. Annual report review (performed by co-op coordinator with rious audiences)

Audiences

Cooperative Education Coordinator A,B,C,D,E,F,G,H
Department Chairman some B, some C,E,F,G,H
Faculty granting credit B,D,F
Other faculty F
Industrial Advisory Board G,H
Director of Cooperative Education H
Dean H
Academic Vice-President H (done by Director of Cooperative Education)
President H (done by Director of Cooperative Education)

AN EVALUATION DESIGN FOR TECHNOLOGY UTILIZATION IN MULTIDISCIPLINARY DISTANCE EDUCATION PROJECTS

Robert Lochte
Viola Miller
Mary H. Boaz

Introduction

Distance learning as a philosophical approach to instruction was based on the concept that quality learning can occur in environments and structures other than those defined by traditional instruction. During the past decade attention to distance learning alternatives has been extensive. This increased attention was in response to changing demographics, student characteristics and available technology. Current thinking holds that (1) institutions of higher education, particularly those supported by the public, have an obligation to meet the educational needs of their service regions, (2) quality instruction can be delivered in a cost-effective and faculty time conservative way to students who do not have immediate and on-going access to a main campus, and (3) most importantly, instructional delivery must be determined by the content to be learned, not by the latest technological toy.

In 1988, Murray State University (MSU), a rural, comprehensive regional institution, began evaluating various technologies for instructional support to extended campus sites throughout our 18-county service region. After extensive analysis and consultation with other institutions and vendors, Murray State was given an opportunity to pilot a compressed video project supported by South Central Bell. This technology, referred to here as Interactive Television (ITV), provided real-time, two-way, audio, video, and computer linkage among sites. The initial project was a point-to-point link with Paducah Community College, a site 50 miles away from the main campus. Since the local community college provided the first two academic years, Murray State was designing a system primarily for the delivery of upper level course work leading toward a baccalaureate degree and graduate programs.

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We were eager to enlist the support of the administration and the faculty. It was obvious from the initiation of this project that careful evaluation of faculty and student attitudes and both local and distant student learning were essential to the success of the project. For the pilot to be adopted as a service model for the region, we were required to demonstrate that faculty were carefully selected and adequately prepared for and supported during the instructional process. Furthermore, and perhaps most significantly, we were required to demonstrate that students were learning in a manner comparable to traditional programs. Because we were delivering upper level programs in education, business, and nursing, compliance with accrediting agencies was also a critical issue to be addressed. From the beginning of this project, faculty preparation and evaluation design were more critical to the planning committee than the technology.

Pilot Project Evaluation Design

The methodological assumptions for the larger evaluation design were based on the theoretical work of Everett Rogers[1] especially in diffusion of innovation, and in the practical applications for utilization suggested by Michael Quinn Patton[2]. As Rogers suggested, the adopters were the critical element in the diffusion process and should be the focus of additional research. Those who must adopt and become comfortable with ITV, if the pilot was to succeed, were the instructors and students. Likewise, the adopters were the decision-makers in Patton's design, and evaluation must provide them with adequate feedback to make reasoned choices.

Gathering data and making practical use of it was, therefore, the overriding concern. Different methodologies, such as surveys, focus groups, observation, and extended personal interviews, were all appropriate. There was no need to generalize the results beyond the population being studied because this pilot existed only to test ITV in a limited classroom context.

What follows are several examples of research projects, their summary results and suggestions for immediate utilization.

In June, 1990, the authors conducted a workshop for secondary school teachers and support personnel, as well as MSU faculty who would be offering an ITV class. The two-week session included an overview of ITV technology, details of how television sees the world, a "refresher" course in instructional method, and hands-on experience delivering typical class material via ITV. All participants videotaped their presentations for review and critique from workshop facilitators. The evaluation instrument was a before/after questionnaire which measured attitudes about and knowledge of ITV as an instructional resource. Results indicated that the participants significantly improved their knowledge of how to use ITV, but had no significant attitude change about the medium.

Beginning in August, 1990, MSU offered six ITV courses in various disciplines. As part of the ongoing training and evaluation, the instructors met with ITV technical and support staff once a month for lunch. These meetings provided an excellent focus group setting, as well as direct and regular communication links. The authors chose to identify this as an evaluation mechanism, but this methodology could be unobtrusive as well. Most of the results from these focus groups dealt with specific problems with the ITV equipment and suggestions for technical improvement. The two major areas of concern were audio quality and placement of the television monitors. Several low-tech problems, described below, also surfaced. There was less sharing of classroom experience and discussing instructors' attitudes about ITV than expected in these sessions. Nevertheless, this regular forum was extremely important and helpful to all persons involved in the pilot. These informal meetings provided a support group for existing and future ITV instructors.

What seemed to work better as an evaluation instrument for instructor attitudes was the extended personal interview, conducted as a "mock utilization" exercise[2]. The purpose was to explore how decision makers used various evaluation results. The results were used to improve the pilot project and to promote a comfortable classroom environment and to foster a positive learning experience. Data on student achievement and level of motivation at distant and originating classrooms were considered most important in determining whether the ITV system was working. Decisions based on these data might range from changes in instructional design to replacing instructors who were uncomfortable with ITV.

The second focus of these interviews was to isolate the key areas of concern for improvement of the ITV system. These concerns will become the subject of future evaluation research designs. Results indicated three issues of extreme importance to the instructors: (1) providing adequate interaction and solving technical (i.e. audio) and non-technical (i.e. students who do not speak up) problems associated with interaction; (2) adapting regular teaching strategies to ITV with a minimum of modification; (3) assessing the relationship between teaching and learning on ITV. Additionally, the instructors related their personal ITV experiences which yielded a large base of qualitative data.

Still another research design, a one-shot exit survey, gave the authors information on student attitudes toward ITV across all disciplines. Ninety-eight students participated in the survey. Two-thirds of the respondents said that they felt comfortable with the classroom environment, found the learning experience comparable to a regular class, and would take another ITV course.

Variables contributing to the ITV learning experience, both separately and in combination, were a good learning environment and adequate interaction with the instructor. Two significant models for the ITV learning environment included course organization and adequate interaction, and satisfactory television monitors and students who feel at ease with ITV. Both the learning experience and the learning environment were significant factors in the students' decision to take additional ITV classes.

The most interesting result of this analysis was that it reinforced the principles of good instructional design in the context of technological innovation. The indication was that ITV need not create major behavior modification on the part of either students or instructors. We have also learned that many of the more significant problems were not related directly to the technology. These difficulties were related to the distance involved and to the need to satisfy a diverse group of faculty with a different medium for instructional delivery. We have come to refer to these concerns and their analysis as "Low Tech Issues".

Low Technology Issues

Initially everyone involved in the ITV pilot focused on using the equipment, orienting faculty and students to its use, providing support to faculty to adapt their courses to the system, and training student technicians to run the system. Once course delivery began, the low tech problems threatened to overshadow the high tech ones. Immediate communication of problems, suggestions, and ideas led to practical solutions. These problems included materials transfer between sites, confidentiality of examinations, and faculty and student communication within this unique learning environment.

A courier system was already in place to support the transportation of library resources between the campuses. This system, however, proved inadequate for the heavy demands of six ITV classes. Classes which met twice each week and required immediate turn around time for homework and handouts were particularly problematic. It soon became apparent that no one system could meet the needs of all classes. A variety of solutions were implemented based upon individual instructor needs. These involved faxing (classroom to classroom), direct mail (homework to instructors), and centralizing and upgrading the courier system.

Maintaining confidentiality of exams required careful planning. Instructor specific testing considerations were identified through the evaluation process. Instructors requiring strict testing procedures either personally proctored the examination or sent the student technician to the distant site. Other instructors used faxing and courier services. When examinations were to be faxed, the instructor tailored a detachable answer sheet. The remainder of the examination was then returned by courier to the instructor. Similar procedures were used when the graded examination was returned to the student. We are currently exploring a value added design which may well provide additional high tech solutions to testing.

Initially students appeared to be somewhat technically intimidated. This response was seen from both local and distant students. Instructors required specific assistance with planning effective strategies to insure student participation. Instructors were encouraged to insure that (1) the cameras followed the voice, (2) class sequencing involved frequent question and answer periods, (3) remote and local students were questioned equally and (4) students were instructed in the use of the equipment for class participation.

Lastly, we were somewhat surprised when students failed to intervene in the instructor's use of the system when it was in their best interest to do so. Even when the remote students could not hear the instructor or see the visuals, they were reluctant to express these concerns. A procedure for giving class by class feedback to instructors was initiated at the beginning of the second semester of this project. Student technicians as well as professional staff attended each class and completed analysis sheets on classroom management and equipment use. This information was given as formative suggestions to the instructors. Based on this information, the instructors made the necessary adjustments early in the semester.

The most critical area of low tech management of a high tech instructional system is "safe" communication. Care should be taken to avoid behaviors that might threaten the instructors control of the instructional process. Delayed use of the evaluation information could well threaten the success of the project. Open lines of communication among the professional facilitators, student technicians, instructors, students, technical supervisors and university administrators is crucial. The faculty's teaching effectiveness could not be judged solely by how well they used a new delivery system.

Conclusion

Evaluation of ITV as a viable instructional medium will be developmental and process oriented. Summative evaluations indicated that everyone was more or less satisfied with the system, and that student learning was not significantly affected by the medium. Of course, this information will continue to be collected and reported as required to various monitoring agencies. However, we were convinced that the success of this project was an evaluation design that provided frequent, often daily, information exchange. This information was then used to continually improve the instructional process.

Endnotes

1. Rogers, Everett (1983), Diffusion of Innovations, 3rd ed. New York: Free Press.

2. Patton, Michael Quinn (1982), Practical Evaluation. Beverly Hills, CA: Sage.

APPLICATION OF QUALITY MODELS IN EDUCATION

Philip D. Rufe

Introduction

Through the 1980's and early 1990's, quality has been a driving force in both American industry and industries abroad. Phrases like, "global competitiveness" and "world class manufacturing" dominate the industrial vocabulary. If American manufacturing and service based industries can analyze and improve the quality of their products through various quality models, can American higher education do the same?

At Eastern Michigan University, the Industrial Technology Department has been forced to deal very closely with this issue of quality, since over 40 percent of its population is comprised of adult learners from industry. Through various tools, such as industrial advisory committees and surveys of graduates from the program, Eastern Michigan University has been able to identify what the customer (industry) wants.

Beyond the Industrial Technology Department's efforts at Eastern Michigan University, there are many other aspects of quality which need to be addressed such as, the measurement of quality, who is responsibility for quality, and customer satisfaction. This presentation will focus on how the Industrial Technology Department at Eastern Michigan University has implemented industrial quality concepts, along with explaining how other quality concepts can be utilized.

Quality in Education

What is Quality

Quality assurance and total quality excellence are popular phrases used in industry today, however, what does quality mean? According to Edward Deming, quality is conformance to specifications. Joseph Juran emphasized that quality implies fitness for use. Finally, Genichi Taguchi describes quality or rather the lack of quality as a loss imparted to society.

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Those definitions work well with industrial products and services, but how can they can be applied to education? To answer this, analyze how industry realizes when they have a quality product or service. The components which determine quality are basically a product and a satisfied consumer. The final product test is, how does the consumer feel about the product? Education, specifically Industrial Technology, has the same factors as industry. Students are the products and Industry is the consumer.

This concept means that colleges add value to the student the same way a painting company paints parts, adding value to the part. but not manufacturing the part from scratch. Students are then "purchased" or hired by industry to perform a task. The final Product test is how well the students perform on the job. If the paint wears off the parts in a short period of time while in use, the product has failed and thus quality is low. If students can not perform the tasks they were hired for, the college's product has failed and the quality is low.

This leads to the issue of customer satisfaction. Total customer satisfaction is the ultimate goal of any industry. An example of industry striving for total customer satisfaction is American Express. American Express sponsors the Quality University in Phoenix Arizona, dedicated to achieving total customer satisfaction. They train their operators on how to deal with customers, record and analyze how their operators treat customers on the phone, survey customers, and provide feedback to the operators with regard to what they are doing wrong and how it can be corrected. Another example of achieving total customer satisfaction is Japanese Industry. Instead of their manufacturing industries being engineer driven. as in the United States, they are consumer driven. This means that the manufacturing industry asks the consumer what they want, and then delivers it. Engineer driven industries build products and then modify them to meet the consumers needs.

Quality Models

What is a quality model? A quality model is a framework consisting of components, when combined, lead to quality. A quality model will generally consist of the following:

1. Measurement Devices

2. A Measurable Goal

3. Prevention Control

4. Responsibility for Quality

Measurement devices in industry can be divided into two categories, attribute and variable. Instruments that measure attribute data, such as "go/no go" gages, determine whether the part is acceptable or not, without describing data about the part. Instruments that measure variable data, such as rulers, micrometers, and calipers, describe how big or small the part was, not just that is was a defect. Education measures the same types of data. Pass/Fail courses and pass/fail tests measure whether a student should either pass or fail, not the student's level of understanding or knowledge. Standardized testing, problem solving, research papers, cooperative education, and final exams are examples of devices which measure variable data such as:

1. How do the students rank compared to other students?

2. What level of problem solving skills do the students have?

3. How well do students manipulate written communication?

4. What level of comprehension do the students have in class?

Setting goals is relatively easy compared to achieving those goals. If total customer satisfaction is the goal, how does one know if it has been achieved or how close they are to total customer satisfaction? In order to answer those questions, the goal needs to be measurable. How does an academic department know if they are producing quality students? One method is to survey employers levels of satisfaction, considering the survey as a measuring device.

Prevention control refers to preventing defects before they occur. This requires constant measuring of the products in process, as opposed to measuring the final product and discarding the defective products. Industry uses a tool called Statistical Process Control, otherwise known as SPC, to monitor the variables of the process during manufacturing. These variables can be statistically manipulated to identify problems in the process. which could have a significant impact on the final product. In education, monitoring students progress and the teaching process periodically, could alert faculty of problems before the final product is defective.

Another component of prevention control is analysis of past failures with a tool called Pareto Analysis. Pareto Analysis graphically displays information about the characteristics of the failure. Through a weighting factor, the vital few can be separated from the trivial many. This means that there are many small problems that do not have a serious effect on the product, however, there are a few problems which have a significant impact on the product. Pareto Analysis can allow teachers to focus their limited time and energy on the problems that have the most impact on the quality of the students.

Who is responsible for quality? In industry, everyone is responsible for quality, from the CEO down to the plant floor worker. Industry typically will have a quality assurance department that facilitates quality but does not act as quality police. In other words, the quality assurance department is responsible for the following:

1. Monitoring quality levels.

2. Evaluating the total quality system.

3. Developing tools to increase quality levels.

4. Analyzing customer satisfaction.

5. Assisting employees in achieving quality on the job.

In education, there is no quality assurance department comparable to that of industry. Of course, all faculty are responsible for quality, however, the above five responsibilities of the quality assurance department are not always satisfied in education, which leads to defects.

Case Study of the Industrial Technology Department at Eastern Michigan University

Program Background

Industrial Technology is a department in the College of Technology at Eastern Michigan University. Industrial Technology is a discipline dealing with the application of technological and managerial sciences related to industry, filling the void between engineering and management. The programs offered in the Industrial Technology Department are Computer Aided Design, Computer Aided Manufacturing, Manufacturing, and Construction. Students graduating from the program are qualified to be manufacturing engineers, process engineers, technical managers, and designers, just to name a few.

Industrial Technology Quality Model

The measuring tools used by the Industrial Technology Department are:

1. Surveys of graduates from the program
2. Advisory committees
3. Teacher evaluations
4. Certification exams.

Surveys of graduates who are working in industry indicates, indirectly, customer satisfaction. Customer dissatisfaction is indicated when students identify areas of Industrial Technology that they need to know on the job, but do not have a background in. If students indicated they knew the necessary information for the job, then a high level of quality for the department is indicated.

To determine customer satisfaction more directly' the Industrial Technology Department utilizes industrial advisory committees for its programs. These advisory committees are comprised of people from industry who work in the specific area of CAD, CAM, Construction, or Manufacturing. In committee meetings, industrial people, the customer, indicate what they expect from college graduates and the department does their best to meet their needs.

Teacher evaluations are fairly common but never the less, illustrate some characteristics about the teacher that may influence the quality of the students.

Certification exams refers specifically to the Society of Manufacturing Engineers manufacturing technologist certification exam, which tests students on all facets of manufacturing. This is the same test that people from industry take if they want to be a certified technologist. Students doing well on that exam indicates a strong Manufacturing program. If students do poorly, it will point out areas of the Manufacturing curriculum that need improvement.

Improvements to the Industrial Technology Model

Like everything else, there is always room for improvement. Improving the quality model in the Industrial Technology Department involves the addition of a few tools.

1. Quality Assurance Department
2. Pareto Analysis
3. Process Monitoring

A quality assurance department would analyze the data collected from surveys in depth, help faculty members analyze their curriculums, and generally steer the department in the direction of continuous improvement.

Pareto Analysis could be used to determine why students have failed in industry after graduation. Through this analysis, faculty members could direct their valuable time to the vital few causes rather than the trivial many.

Process monitoring means examining test scores during the semester, for example. Is there a trend forming? Does that trend mean the final product will be defective? Process monitoring could be used for cooperative education students also. How well do these students perform at the cooperative job? If their performance is low, the problems can be corrected before they become a finished product. Those problems can also be corrected before new students enter the cooperative education program.

Conclusion

In conclusion, continuous improvement is the goal of any quality program. Achieving this means the addition of measuring tools, analysis tools, and many others. The bottom line is that the level of quality will only be as high as the level of commitment by faculty or industry.

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ASSESSING STAFF PERFORMANCE: A PROCESS APPROACH

Mary Ellen Shaughnessy

It started simply enough: a memo from the Dean in November, 1989, requesting three of the Adult Degree Program faculty advisors to serve on a Project Team dealing with faculty evaluation.

The charge was threefold:

.. To look at what is being proposed for campus faculty in the traditional program

.. To review what each of the three ADP Centers is doing and proposing to do in the future

.. To come up with recommendations for the Program as a whole

The task evolved into a major restructuring of the evaluation process for faculty advisors in each of the three Program Centers.

Let me begin with some background.

The Adult Degree Program (ADP) is a program of Capital University, a liberal arts institution located in Columbus, Ohio. There are three ADP Centers-in Columbus, Cleveland and Dayton-with a combined enrollment of 1000 students. The ADP mission statement reads:

> As an integral component of Capital University, firmly committed to the university's mission to provide academic integrity, ADP strives to maintain and extend excellence within the liberal arts tradition by providing quality higher education to adult learners. Through integrative advising and teaching, ADP provides flexible learning environments which encourage self-directed, proactive and interdisciplinary approaches; a commitment to the values of experiential and life-long learning; and a fostering of the development of each student's personal enrichment and social awareness.

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The majority of ADP students enter the program with transfer credits. They share a common goal: completion of the undergraduate degree. Career advancement is the motivating factor with a majority of the students, followed by personal satisfaction and the desire to finish something that they had begun years ago. Median age of students hovers around forty; few are under thirty.

The strength of ADP is its commitment to "flexible learning environments which encourage self-directed, proactive and interdisciplinary approaches" (Mission Statement). This flexible learning environment is labor intensive for the faculty advisor whose role is 60% advising and 40% teaching, a ratio in significant contrast to that of the "traditional" faculty member whose role is defined and evaluated, in Capital's environment, by excellence in teaching.

It was this disparity in role definition that led to the creation of the P-Team and to the eventual development of the Evaluation tool which is the subject of this paper.

The heart of the ADP success story is the Faculty Advisor who works with students, 55 being the usual load, to analyze transfer credits, focus on a major, create a degree plan and manage the transitions common to adults returning to learning.

The student choosing a Multidisciplinary Major, and that is easily 50% of ADP students, not only faces many choices but generally needs close advising around the choices. Such advising involves decisions about goals, career plans, interests and the most efficient use of transfer credits. The final product involves a rationale statement and list of objectives which this multidisciplinary major will support. The student following a department major faces fewer choices; the main ones are how to best use transfer credits to satisfy of the CORE and the Major.

A second aspect of the ADP faculty role is the design of individualized learning contracts for independent study courses. A student needs to complete 36-39 hours in CORE studies, most of which are conducted in small group. Beyond that a student can complete the degree program through independent study, based on carefully articulated learning contracts which outline learning objectives, learning methods and evaluation of learning outcomes. A faculty member in ADP will conduct both small groups (maximum 15 students) and independent studies in a given semester.

This background, then, should highlight the problems which gave rise to the Project Team. A full-time faculty advisor in ADP was evaluated annually by an instrument designed for the full-time faculty member in the traditional program. True, some elements are common. Excellence in teaching is excellence in teaching. Students and outcomes will attest to that. Both traditional and ADP faculty serve the academic community. Both traditional and ADP faculty are expected to grow professionally. But will they do it in the same way? An ADP advisor maintains a 25 hour per week office schedule in addition to 5 hours per week of teaching. This contrasts with the 12 hour teaching schedule of traditional faculty. The evaluation instrument did not reflect the reality of ADP responsibilities nor provide a record of accomplishment for future decisions about promotion and tenure.

The new Faculty Evaluation document, completed in November, 1990, came to life through a program-wide involvement of faculty and administrators at every step of the evolution.

At a statewide Faculty meeting in March, participants developed a list of Key Roles which they felt adequately described the job and the duties which they performed on a day-to-day basis. These roles were:

1. Advisor/Counselor
2. Administrator
3. Recruiter
4. Learning Facilitator/Instructor
5. Service
6. Research
7. Faculty Membership
8. Professional Self
9. Evaluator

At the ADP statewide retreat in June, participants, working in small groups, then developed lists of activities which characterized each role, activities which should characterize each role, and measurements which the Director could use to determine how well a faculty member was carrying out the responsibilities of the role.

Not unexpectedly the pursuit of light also generated considerable heat. Even the best evaluation instrument ends up relying on subjective judgments, by both the faculty member and the Director. Also, the nine roles delineated required diverse skills which could not reasonably be expected in equal measure in every faculty member. Finally, faculty accustomed to rather general assessments of their performance did question what might become a more quantifiable approach to evaluation.

Between June and August, a six member team worked on transforming the brainstorming ideas into techniques and procedures.

If there was any one thing that characterized the group process that followed, it was constructive conflict: disagreement about roles, disagreement about activities, disagreement about measurements for evidence of performance, disagreement about format.

At their first meeting, the team invited in a human resource consultant. Presenting samples of job descriptions for management-level positions in industry, she worked with the group to adapt the model to their needs. These models gave some structure to the data gathered in earlier meetings.

In addition, the team reached agreement on what would become the Key Elements of the job:

- .. To establish and maintain an effective relationship with students resulting in their successful completion of quality degree plans
- .. To teach courses, both group and individual study, resulting in a learning experience for the student that adds to knowledge and skills, meets individual needs and fosters a commitment to lifelong learning
- .. To provide service to ADP and the University, resulting in furtherance of the Program's objectives and creative leadership in achieving them
- .. To engage in professional development activities, resulting in continuing growth in one's field
- .. To engage in recruitment activities, resulting in greater public awareness of ADP and increased enrollment

At this point the team focused on the delicate balance between task orientation (getting the job done by a deadline) and sensitivity to the responsibility in their hands (creating an instrument with implications for people's career progress). This delicate balance generated soul-searching and intense discussion not about the WHAT of the job but about the HOW, the accountabilities and the evidence of performance.

Some activities are easily observed, e.g., "Keeps evening office hours schedule to accommodate students' needs." or "Registers students to meet University deadlines." Evaluations completed by advisees annually and by students at the end of each course provide additional data.

The intangibles caused struggles, however. Should advisors be evaluated on the quality of student products, e.g., degree plans and senior projects, when they have limited quality control? How will a Director determine that advisors keep current on theories, practices and issues related to their own discipline in particular and to the adult learner in general?

Considerable discussion developed over the element of Recruitment. Faculty advisors conduct information sessions, handle admissions interviews, field telephone inquiries and attend college fairs. But clearly not everyone relishes or even enjoys active recruiting activities. This reluctance collided, however, with the views of one team member who considered recruitment a major responsibility of the position. This surfaced a fundamental question in the evaluation process: how do we create an instrument that would enable people to be successful, given their diversity and the diversity of the job?

Must everyone be evaluated against exactly the same set of criteria? Will a disinclination to do recruitment seriously affect the final rating? To what extent should recruitment be factored into future decisions re promotion, salary increases and tenure? With merit increases a likely reality in the near future, this issue crystallized anxieties.

The group reached this resolution: Advisor and Director will, at the beginning of each evaluation year, agree on the distribution of responsibilities for that year, aligning these with the development goals that they have established. A breakdown might look like this:

Advising	40%
Teaching	30%
Service	15%
Development	10%
Recruiting	5%

The flexibility serves both Advisors and Directors. Advisors can devote energies to those areas in which they know they can excel. Directors can assign resources where they can be most effective. On the other hand, Directors can use this flexibility to work with advisors in professional development, e.g., increasing an advisor's Recruiting activity for a particular year to develop more staff expertise in this important area.

Over the summer of 1990 the team produced, reviewed and refined several drafts of what would become the final document. In August they presented an excerpt of the document to the entire ADP staff at the annual all-campus retreat. The morning session of the November statewide ADP staff meeting was devoted to review of the document. (See Appendix A for sample page). Faculty working in small groups reviewed the entire document, recording their questions and concerns.

The report-out to the reassembled large group revealed considerable positive response to the document. Comments and concerns tended to be shared by several of the groups, an affirmation, for sure, of the P-Team's efforts.

One final round of revisions followed until the P-Team presented a final document to the Dean and Center Directors in December. This document consists of four sections:

- Job Description
- Key Elements:
  - Advising
  - Teaching
  - Service
  - Recruitment
  - Professional Development
- Self-appraisal Form
- Director-appraisal Form

The package will be implemented beginning January, 1992, for evaluation of 1991 performance. Advisors at two centers did, however, complete the self-appraisal segment for their 1990 evaluation, basing it on the Key Elements section. Although firm data on its feasibility is not yet available, anecdotal information indicates that both Advisors and Directors appreciated the structure of the document.

More important, however, advisors appreciate the relevance of the document. It reflects the reality of what they do in their day-to-day jobs. It evaluates them against activities and criteria which are relevant to the jobs that they do, not the jobs which faculty members in the traditional program are expected to do.

Several conclusions:

Process works. Input at every stage of the process provides an abundance of ideas on which to draw.

Input at the outset of the project encourages acceptance since people are more inclined to commit to what they have helped to create.

Conflict can energize, point out issues that need clarification and lead to greater awareness and cooperation.

ASSESSING EXPERIENTIAL LEARNING IN UNDERGRADUATE PROGRAMS OFFERED AT OFF-CAMPUS SITES THROUGHOUT SOUTHERN CALIFORNIA

Judith C. Thompson
Shirley A. Wilbur

> The tragedy of the world is that those who are imaginative have but slight experience, and those who are experienced have feeble imaginations. Fools act on imagination without knowledge; pedants act on knowledge without imagination. The task of a university is to weld together imagination and experience.
>
> Alfred North Whitehead
> 1861 - 1947
> Professor of Mathematics at Cambridge
> Professor of Philosophy at Harvard
> Education Reformer

Founded in 1907 and accredited by the Western Association of Schools and Colleges, the University of Redlands is known for its long tradition of academic excellence.

In 1976, with the initiation of the Alfred North Whitehead Center for Lifelong Learning, the University established itself as a leader in adult education. Offering high quality degree programs in business administration, education, health science, information systems and management at off-campus sites throughout Southern California, Whitehead enables career professionals in industry, public service and teaching to achieve their educational goals without disrupting their work lives. More than 13,000 fully employed men and women have earned University of Redlands bachelor's and master's degrees through Whitehead programs since 1976.

Redlands offers several external degree programs through Whitehead. Two of the undergraduate degree programs are accelerated, lockstep programs for students who have already completed up to two years of

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general education. The Bachelor of Science in Business and Management is a 60 week, 39-unit program. The Bachelor of Science in Information Systems is an 82-week, 48-unit program. The Bachelor of Science in Business and Management with emphasis in Health Care Management may be earned by completing an additional eight units in Health Care Management coursework. The third undergraduate degree program is a four-year Bachelor of Science in Business and Management requiring a high school diploma and no previous college credit.

The graduate programs offered through Whitehead are a Master of Business Administration, a Master of Arts in Education and a Master of Arts in Management.

In acknowledgement of experiential learning as a cornerstone of the educational philosophy of the Whitehead Center undergraduate programs, all students enrolled in the 39 and 48 unit programs are required to develop a Life Learning Portfolio. The Portfolio is divided into six separate sections as follows:

Section I - Resume
Section II - Formal Credits
(all transcripted college work)
Section III - ACE-Evaluated Training*
Section IV - Professional/Certificated Training*
Section V - Autobiography
Section VI - Life Experience Essays*

Students who need additional units for the degree requirement of 120 units may earn such credit through evaluation of prior learning presented in this portfolio. The components of evaluation of prior experiential learning include presentation of professional and certificated coursework and Life Experience Essays. Professional and certificated coursework is considered earned credit with no restrictions on the number of units allowed; whereas, Life Experience Essays are certified credit with a limit of 30 units.

The sense of self-worth and confidence that comes from pulling together the threads of life-long learning are not contingent upon the academic credit earned, yet, is among the greatest rewards reaped from the portfolio development process. The resume, formal credit and autobiography sections of the portfolio, by their nature, do not generate any credit. Each of these sections, however, is especially useful as a reference for the faculty evaluators and the Academic Advisors throughout the assessment process.

The American Council on Education (ACE) evaluated training, professional/certificated learning and life experience essay sections are evaluated for possible credit toward the degree. Where a professional course or program has been evaluated by ACE, the ACE recommendation will take precedence over any other evaluation. In cases where a student's military or professional course is found as a course exhibit in the ACE guide, the Center must ensure the following in order to award credit:

1. the ACE credit recommendations are for baccalaureate level credit (rather than vocational credit);
2. recommendations for lower division credit do not exceed the maximum of 66 lower division units that may be applied to the degree;
3. an equivalent University of Redlands course exists for the recommended subject area;
4. University of Redlands course awards for such recommendations do not duplicate other credit to be applied toward the degree.

Students who wish to have their ACE-evaluated training considered for credit must provide documentation of completion. This documentation must be from a primary source in the form of certificates, official training records or letters (on letterhead). A copy of the DD214 form or current training record is required for documentation of military schools or courses.

The professional/certificated learning section allows the student to present evidence of training not evaluated by the American Council on Education. This section should include all formal courses such as seminars, workshops, etc., from non-accredited institutions, public or professional agencies, or employers. It is the student's responsibility to provide adequate documentation so that faculty evaluators will have sufficient information to determine if the learning is college level. For our purpose, the term "college level" refers to activity involving the learning of theories, concepts or principles with some broad applicability, and for which an equivalent University of Redlands course exists. Courses involving highly technical, remedial or vocational training are not considered to be college level, and there are no University equivalents for this type of activity. Documentation for this section consists of verification of completion and hours, a statement of learning outcomes and a course syllabus or outline. Verification of completion and hours must be from a primary source (the sponsoring agency, the instructor, a training or personnel officer, student's supervisor). This may be presented in a certificate of completion, a letter (on letterhead) or official training record. Course hours may also be presented in a pre-printed brochure, program schedule or course outline.

The statement of learning outcomes is a one to two page statement explaining the learning acquired from a course and how that learning has been applied. The purpose of this statement is to have the students demonstrate what they have learned and what they can do as a result of a course.

The course syllabus or outline enables faculty evaluators to determine the academic level and evaluate the course content. If a syllabus or outline is not available, this information should be included in the statement of learning outcomes.

Credit will be awarded for properly documented courses based on content and length. For those courses determined to be college level and for which there is a University equivalent, faculty evaluators will equate forty hours to one unit of academic credit. Twenty of the forty hours must be contact time; the remaining twenty hours are demonstrated in the statement of learning outcomes.

Learning among adults is an active process of inquiry, not merely a passive transmission of information. The life-learning experience essays in the final section of the portfolio allow the student a more creative and flexible format for the presentation of prior learning. A life learning experience essay is a documented, student-written narrative of several pages detailing college level experiential learning which corresponds to a specific course offered through the University. Each essay exists as an articulated course challenge which will be evaluated by the faculty designated by the appropriate department chair.

The key word in this exercise is "learning," which we emphasize to the point of redundancy: the presentation of undigested learning is not enough! To assist students in presenting all aspects of their learning, the University has adapted the learning model advanced by Kurt Lewin in an article by Lewin, R. Lippitt and R.K. White (1939) entitled "Patterns of Aggressive Behavior in Experimentally Treated 'Social Climates'," contained in the Journal of Social Psychology, Volume 10.

Graphically the model looks like this:

A
Concrete Experience

D
Testing Application

B
Observations and
Reflections

C
Abstract Concepts
and Generalizations

The model represents a cycle--a process which may be repeated again and again. Typically, the starting point for learning acquired outside the formal classroom is Step A, whereas traditional students begin the process at step B or C.

Each essay must cover all four steps of the learning model. These essays are not merely an expanded autobiography or collection of personal anecdotes. Conversely, an effective essay is not a research or term paper. Students are not prevented from using outside sources; however, the essay must be based on personal experience. The essay should convey what was learned and how it was learned--the learning process must be clear. The learning presented should have general applicability outside the specific situation in which it was acquired and demonstrate relationships between the identified learning and other related subject areas or fields. A life learning experience essay package contains:

- a petition form

- an essay of at least five full pages

- documentation of concrete experience.

The faculty evaluators award unit credit based on how well the student is able to demonstrate college-level learning in relation to the course description challenged and within the framework of the learning model. Academic credit for the learning experience essay is awarded on a credit/no credit basis. It is possible for a petition to receive full, partial or no credit. If an evaluator does not find enough evidence in the essay and documentation to award full credit, but believes the student may have college level knowledge in the area, the evaluator may offer the student the following options:

a. additional evidence (narrative or documentation);

b. essay exam;

c. oral exam;

d. proctored objective exam

The Life Learning Portfolio is initially developed in Management 310, Philosophical Foundations of Management the first course in the program. This 12-week course is team-taught and deals with basic theories of human nature and personal and professional assessment. The University views this course as a major cornerstone of its programs and students are required to pass this course in order to continue in the program.

To assist students with the continuing, as well as initial, development of the portfolio, an academic advisor is assigned to each cluster. Advisors visit each assigned cluster twice during Management 310. During these visits, the advisors cover policy and procedures relating to degree completion, including the portfolio and its evaluation. After the initial evaluations of the portfolio (during first 1/3 of program), the advisor reviews the portfolio and evaluator comments in order to generate a tentative plan of completion. Students are contacted by phone to discuss evaluation results and formulate a completion plan. This plan reflects the student's goals as well as the advisor's suggestions. It may include the College Level Examination Program (CLEP exams), University of Redlands weekend and completion course and approved transfer credit, as well as suggestions for additional portfolio submissions. Students have six months from the last night of their major program to submit items to the portfolio; they have four years from the first night of class to complete the degree. Although academic advisors are based at the main campus, not in the regional centers, they are available to students by telephone, FAX and other types of communication. Being based at the main campus allows advisors direct access to current and complete student information.

Whitehead's full-time faculty, also based at the main campus, are responsible for curriculum development, assessment and evaluation of adjunct faculty, and function as lead faculty in the major disciplines. The adjunct faculty are qualified by their experience in the real world of business and management, as well as their academic credentials.

The curriculum at Whitehead provides a balance of theory and practical applications. The curriculum and delivery format are designed to promote critical thinking and to enhance writing, public speaking and interpersonal skills. These programs are rigorous and require a substantial commitment of time, energy and effort.

ACADEMIC QUALITY IN OFF-CAMPUS PROGRAMS

Thomas M. Tynan
Donald H. Winandy

Requirements for Off-Campus Programs in Connecticut

In 1986, the Board of Governors for Higher Education established, on the recommendation of the Commissioner of Higher Education, academic quality standards for all off-campus programs offered in Connecticut. The Board acts as a statewide coordinating body and is responsible for the initial and continuing review and approval of institutions and programs of higher learning operating in the state. Unlike most state coordinating boards, its program approval standards extend explicitly to independent as well as public institutions.

In establishing approval standards for off-campus instruction, it was the Board's philosophy that all credit instruction offered by an accredited institution away from the institution's primary campus shall meet the standards required of instruction on campus. While taking the form of regulation, these standards embody a set of sound practices which can be implemented by any institution interested in maintaining the academic quality and vitality of their off-campus offerings.

The first standard is that all off-campus instruction be consistent with the overall purposes and objectives of the offering institution. Consistency to institutional mission extends to building on institutional strengths.Successful programs off-campus are often the ones that are well regarded and supported on-campus.

Admission standards need to be the same as standards applicable to students enrolled on the primary campus.Separate standards have led to off-campus courses in which the students could not automatically transfer into the same program on-campus. To further ensure programmatic consistency, the Board requires that the quality of off-campus instruction, including faculty selection and course approval, be the responsibility of the same academic unit (department) which administers the program on the primary campus. Each course is to be consistent in

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quality, content and standards with resident courses offered back on the primary campus. Courses need to be derived from currently approved programs and specially created offerings for a one time market are discouraged.

Another requirement is that instruction be delivered by qualified instructional staff. Faculty should have appropriate degrees from regionally accredited institutions, at least one level above the degree being offered, or they shall demonstrate an equivalent level of competence. A reasonable ratio of full to part-time faculty should be maintained and provision should explicitly be made to encourage contact between the full and part-time faculty. It is recommended that at least fifty percent of the off-campus faculty be from the primary campus and that department heads be directly involved in evaluating part-time faculty performance off-campus.

The Board further requires that all students have access to adequate facilities, equipment, library resources, academic advising and other necessary instructional support services. A qualified faculty or staff must be responsible for the coordination of off-campus instruction, and a permanent residential coordinator is strongly encouraged for the larger sites.

Library support is subject to the following requirements: (1) there shall be provision for a core collection, including both circulating and reference materials sufficient to meet the needs of both students and faculty, to be provided either at the site or via written agreement (which includes borrowing privileges) with a nearby library; (2) there will be provision for a reserve reading collection at or near the site; (3) there shall be provision for professional library staff support for library services at or near the off-campus site; (4) there will be provision for additional materials to supplement the core collection (through computerized bibliographic access and document delivery system); and (5) there shall be provision for adequate annual budget support for library resources at or near the site.

Institutions proposing off-campus programs must submit an application to the Department of Higher Education (the administrative arm of the Board). As part of the review process there is usually an evaluation visit conducted by a committee of professionals in the field.The evaluation report is reviewed by a statewide Advisory Committee and a finding of compliance or noncompliance is sent to the Board for its approval.

Off Campus Trends

An annual report on off-campus activities is conducted by the Department in order to update the Board on the development of off-campus offerings and highlight any developing trends. In Fall 1990, all 47 Connecticut colleges and universities were surveyed. There have been three previous surveys of off-campus offerings in Connecticut. The first was done in Fall 1983 as part of the Board's request to develop a proposed policy concerning review and approval of off-campus programs. The second was done in Fall 1986 to update the inventory of approved programs. The Fall 1988 survey began the annual survey of off-campus offerings called for in the Board's guidelines. The 1988, 1989 and 1990 surveys were identical in scope and analysis. The two earlier surveys, while not completely compatible, provide a valuable perspective from which to view off-campus trends over an extended period.

As can be seen in the attached Table, there has been a resurgence in the number of students taking off-campus courses. Enrollment declined by a thousand students between 1983 and 1988. However in Fall 1990, it had reached a high of 10,997 students generating 41,010 credit hours. This is 6.5 percent of the total head count at Connecticut colleges and universities and represents an "at large" student body the size of Yale University. There were 774 classes and 133 programs offered. While the largest concentration of programs were in the field of business (45%), there is a wide range of programmatic offerings including computer science, education, engineering, liberal arts, physics, ship building and industrial science. It is anticipated that off-campus activity will continue to grow as Connecticut's economy is in decline.

Connecticut is known as the land of steady habits,and this appears to describe its off-campus activities.In Fall 1983, there were 137 off-campus sites and in Fall 1990, there were 141. Well over fifty percent of all off-campus sites was generated by eight to ten institutions. Over the five years surveyed, the total number of courses offered has not varied by much more than 150. In 1983, there were 115 off-campus programs, in 1990 there are 133. Enrollment has varied in that same period by 1,300 students, and student FTE by 680.

Most programs are at the associate level. Although there is a clear growth in masters programs, there are no doctoral programs, and only five certificate programs. Independent institutions are primarily oriented to offering programs and at sites of long standing. Public institutions offer more non-program related courses and at a variety of sites. Programmatic activity off-campus evidences little, if any, "head to head" competition between schools. The stability of these off-campus operations has allowed the institutions to invest in their academic quality. Judging by the reports of the various evaluation teams which have visited these sites, the quality of these programs continues to strengthen.

Geographically, off-campus activity has been confined to the major southwest-northeast population corridor of the state--the same corridor in which almost all the colleges are located. Over 75 percent of all off-campus program are within 30 miles of the primary campus and are frequently within 30 miles of several other colleges as well. Few attempts have been made to reach the more remote, less populated areas of the state. Since 1983, three distinct types of off-campus credit activity appear to be developing.

Overflow from the primary campus

As enrollments increase at primary campuses (especially the community colleges), administrators are looking for suitable sites relatively close to the primary campus to handle the overflow, such as a local secondary school.Because of its relative proximity to the primary campus (within ten miles), administrative oversight becomes easier, full-time faculty frequently teach the courses, library resources are comparatively close at hand and students often take courses at both the primary and off-campus sites.

Contract offerings

These are mostly in corporate offices and hospitals and in the major cases appear to be a single course offering or a cluster of courses. They are often designed as a gateway experience to lead the employee onto campus in pursuit of a degree program. As corporations tend to down-size their own training programs, contract offerings were projected to grow. This has not happened and it appears that it is in the area of noncredit activity, rather than degree oriented courses, that most of the activity is occurring.

Off-campus centers

These occur in areas in which the demand for collegiate education is currently not being bet by existing local institutions. Local is less than 10 miles distant, as Connecticut residents are reluctant to commute more than 10 miles for college courses. This situation attracts "imported" degree programs (in whole or part)from institutions located outside the region.

The Groton/New London area is a prime example of an off-campus center. There are over 2,000 off-campus students and 15 off-campus sites in this area which is 28 miles distant from a comprehensive state university and 15 miles from both community and technical colleges. Three of the institutions offering these off-campus programs are located over 50 miles from Groton/New London. Due to the relative distance from the primary campus a more concerted effort must be made by the institution in order to comply with the Board's academic quality standards.

There also appears to be a trend towards consolidation of degree programs. In Fall 1983, 115 degree programs were offered in whole or part, and of these, 64 were offered completely off-campus. In 1990, 133 degree programs were offered in whole or part and 100 of these were offered completely off-campus. Partial program offerings are being consolidated into off-campus programs.This may be in response to student interest in taking as much of the program as possible at a site convenient to home or the workplace. Also, complete programs are more cost effective as they generate more credit hours per course than do single course offerings.

Quality Assurance for Connecticut's Off-Campus Programs

As you would expect, the prime objective of off-campus program development in Connecticut is service, and the major challenges to quality program offerings are the availability of full-time faculty and providing library and learning resources. Our key criteria for operation are: first, to have at least fifty percent of off-campus courses taught by full-time faculty; and second, to have at least a core library on site or nearby, assured by a written agreement providing full use of an appropriate collection.

There are in Connecticut several interesting examples of off-campus offerings. Each example demonstrates a different approach to providing the best service and how the sponsoring college or university addresses the quality standards of the Board of Governors.

An out-of-state institution operates a program in Connecticut to take advantage of a special resource. An out-of-state institution uses features of its program in Connecticut as a model for a 16 program network. In two cases public institutions provide resources on their campuses for programs offered by independent institutions.Specific examples are as follows:

Bridgeport Engineering Institute (BEI)

BEI provides an example of cooperation between a small independent college and a public university. BEI is an independent college in Fairfield that offers associate and baccalaureate engineering programs in the evening to apart-time clientele of 900 students. BEI operates branch campuses in Stamford and Danbury, each within 20 miles of the primary campus. The Danbury branch is located on the campus of Western

Connecticut State University, an institution of 6200 students, which does not offer engineering programs. BEI uses classrooms and library resources of the university and provides funds to strengthen its reference collection.

Hartford Graduate Center (HGC)

HGC provides an example of cooperation between a specialized graduate school and a state university. Rennsaelaer Polytechnic Institute established HGC in response to a need for graduate engineering programs in the Hartford area. HGC now is a Connecticut institution of 2200 part-time graduate students, but maintains a contractual tie with RPI, offering both its own degrees and RPI degrees in select areas. HGC operates a satellite center on the Southeastern regional campus of the University of Connecticut at Avery Point.

Mohegan Community College (MCC)

MCC is a two years college with 3100 students. It offers three associate degree programs for 284 students on the Naval Submarine Base. To supplement the base library,the college has a written agreement with the nearby Groton Public Library for shelf space and general services.

Sacred Heart University (SHU)

Sacred Heart University of Fairfield is located in the southwestern corner of Connecticut with an enrollment of 4400 students. SHU has satellite centers serving 900 students in five other towns. The two major centers are in Lisbon, a town in the far eastern part of the state, for graduate teacher preparation programs; and Stamford, to the west where business and education programs are being offered just outside the downtown on the campus of St.Basil College. The college is closing in July, but is giving SHU a ten year lease on a major building.

Southern Illinois University at Carbondale (SIU-C)

SIU-C is a major public university in Illinois offering an upper division B.S. degree program invocational studies on 16 military bases, including the Naval Submarine Base in Groton, Connecticut, where 65 students are enrolled. The university program collection has been incorporated in the base library, and an agreement has been made with Connecticut College library,containing 300,000 volumes, for the use of its general collection. Each semester a university librarian provides an orientation to new students including a tour of the base library and the Connecticut College library. The library arrangements for the Connecticut site now are the model for the 16 base network.

University of New Haven (UNH)

UNH provides an Executive M.B.A. program in five locations and operates a branch campus in Groton. The Groton operation is the largest with 800 undergraduate and 300 graduate students. Like Mohegan Community College, the University of New Haven has a written agreement for the use of the Groton Public Library. This agreement provides for the shelving of 3500 books and 169 periodicals in the library.

Williams College

Williams College offers a one semester American Maritime Studies program at the Mystic Seaport Museum in Mystic, Connecticut for members of a 20 college consortium. The program includes two weeks at sea on a 100 foot oceanographic research vessel.

The program, enrolling 20 to 22 students each semester, was brought to Connecticut to take advantage of a special resource, the Mystic Seaport Museum including the Munson library which has 39,000 volumes and 300 periodical subscriptions. Mystic is what is known as a living museum. It is a restored fishing and whaling village with restored sailing vessels.

Off-Campus Credit Activity in Connecticut

	1983	1986	1988	1989	1990
Unduplicated Head Count	10,722	9,864	9,647	10,476	10,997
FTE (Credit Hr/15)	3,025	2,682	2,345	2,514	2,736
Credit Hours:					
Undergraduate	38,396	27,890	25,122	29.037	30,819
Graduate	6,965	12,346	10,058	8,670	10,221
Total	45,370	40,236	35,180	37,707	41,040
Number Courses Offered:					
Undergraduate	546	557	500	567	553
Graduate	188	273	189	197	221
Total	734	830	689	764	774
Number Degree Programs:					
<50% Coursework on site	51	71	74	46	33
>50% Coursework on site	64	93	82	92	100
Total	115	164	156	138	133
Number Degree Programs Offered in:					
Business	43	74	64	64	60
Computer & Info Sci	7	7	9	6	7
Education	6	11	9	15	16
Engineering & Eng Tech	14	26	16	16	14
Nursing & Allied Health	6	4	2	4	4
General Education	n.a.	17	19	15	11

Source: Off Campus Credit Offerings by Connecticut Colleges and Universities - Fall 1990 Survey. Department of Higher Education, Hartford, Connecticut.

CREATING ACADEMIC PARTNERSHIPS

A WORKING PARTNERSHIP:
UNIVERSITY EDUCATION WITHIN CORPORATE ENVIRONMENT

Richard H. Austing
Sally Wilding

Introduction

From April, 1989 through December, 1990, the University of Maryland University College and a major corporation cooperated in a unique academic program to educate a selected group of the corporation's employees. The success of this undergraduate program speaks to the effectiveness of the model as well as to the ability of university and corporation representatives to define and understand their roles as partners, and to deal effectively with a variety of issues, including distinctions between education and training.

This paper addresses the significant aspects of the partnership. First, the program is described, then its features are discussed, including the need for long-range evaluation. This discussion contains pertinent ingredients for future university-corporation partnerships.

Education Program

The purpose of the program offered by the University of Maryland University College was to prepare a selected group of IBM employees for work on software engineering projects in the corporation. To meet this goal, a collection of courses was offered by University College, the majority of which were regular university courses, with additional courses created to include topics from the corporation's training courses.

The program consisted of two segments. The first session was completed in sixteen weeks, and involved 11 credit hours of coursework in study skills, basic mathematics, and introductory programming. The second session was completed in sixteen months, and involved 36 credit hours of coursework in computer science and 6 credit hours of work-study. Students who completed both segments had 53 credit hours that could be applied to a

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bachelor's degree program, including sufficient credits to meet University College's requirements for a primary concentration in computer science. Those students who already had a bachelor's degree could earn sufficient credits to obtain a second degree.

All courses were delivered at the corporation site. The physical facilities were provided by the corporation. They included a classroom, a computer room that housed one microcomputer per student, office space for staff (director, faculty, academic counselor, and assistants), rooms containing one desk per student, and a common area. The employee cafeteria was nearby.

The students were regular employees whose full time assignments were to participate in the program. This required their being on-site forty hours per week throughout both segments of the program. A corporation employee was available on a full time basis to deal with any corporation related situations or issues. University College provided the following personnel:

* program director

* faculty/curriculum specialist, who guaranteed that the University's academic standards and the corporation's retraining program requirements were met

* academic counselor, who provided academic advising, helped students adjust to academic commitments, and reviewed academic credentials for degrees

* faculty and assistants.

The first segment of the program began with sessions on study skills, time and stress management, and confidence building in the learning of mathematics. These sessions were followed by a two-week review of topics in college algebra, and a sequence of two six-week courses in Pascal programming. This segment of the program was completed during the period from late April to the middle of August.

In early September, the second segment began. This segment was offered on a fall-spring-fall semester basis, with a summer of work-study. Four courses were offered each semester. In the fall, these courses were Discrete Structures, Computer Organization, Control Structures, and Data Abstraction. In the spring, Data Structures, Organization of Programming Languages, Computer System Architecture, and Principles of Software Engineering were offered. During the summer, the students worked in the corporation on a variety of jobs under managers who were oriented to the total program. In the last semester of the program, the four courses were Design and Analysis of Algorithms, Operating Systems, Fault Tolerant Design Concepts, and program Testing and Validation Theory and Techniques.

The 32 program participants were selected by the corporation. The employees represented a wide diversity of education and work experience. Their educational background ranged from two-year programs to graduate degrees, mostly in non-technical areas. Their work experience ranged from relatively new employees to 15 or more years on the job, and included work as secretaries, programmers, and finance personnel. Twenty-eight students completed the program. Eight of the students received University College bachelor degrees in December, 1990. Sixteen others are eligible to complete their degree requirements by taking additional courses within the following year.

Program Features

A University education within a corporate environment required the building of a college's departmental structure within the program's setting. Faculty were imported, classrooms and study halls were designated and curriculum meetings were regularly scheduled. Early in the program the additional need to provide traditional student support services became apparent. Successful students have historically relied on such supports as academic counseling, appropriate learning facilities, tutoring availability and appropriate mainframe, microcomputers and software support for those studying computer science. All these support systems were equally important to corporate students and these systems were built into the program.

A partnership arrangement in an educational endeavor requires considerable attention not only to traditional aspects of educational programs but also attention to unique variations in standard program features. Three program features requiring the most attention were academic counseling, flexibility and academic attitude. In a traditional educational environment these features are either completely integrated or so relatively minor to the educational process that there is no need for continuous examination on their status. It became apparent that within this nontraditional setting, repeated efforts were necessary to incorporate and monitor these features throughout the length of the program.

Academic counseling, perhaps one of the most foreign educational support activities to a corporate setting became one of the essential pieces of the program. An academic counselor was available two days a week and the counselor's busy schedule testified to the great need of this service. Over twenty of the students made appointments with the counselor during the first month of classes and most students made repeated appointments throughout the program. Information on degree requirements, study skills, time management and academic confidence were repeatedly expressed student needs.

Success in keeping students motivated to continue under stressful academic demands can be largely attributed to the counselor's assistance. Maintaining motivation seems to be strongly affected in a positive direction by evaluations on individual degree requirements. Many students had previously earned a wide collection of college credits from various institutions. Putting these credits together in some meaningful individualized academic package allowed some students to see for the first time all the remaining steps towards a bachelor degree. It is rewarding and interesting to note that 75% of these students either received a Bachelor's degree at the program's completion or are expected recipients within the following eight months.

Flexibility was another feature required for a successful partnership. Students were being paid for a forty-hour work week with work consisting entirely of pursuing their studies. This employer expectation on forty hour work weeks meant that the academic calendar fit within the corporate calendar. The University's required fifteen week sessions were distributed over the calendar year. Registrations took place before the beginning of each fifteen week session. Registrations were at the corporate site since the University did not have standard registration days to coincide with a corporate timetable. Willingness to be flexible was a must for both partners as the corporation and the University blended two distinct environments into one.

While the University was called upon to be flexible in scheduling concerns, it was perhaps the corporation that needed to be most flexible with academic matters. Education in the corporate world is primarily limited to training programs and it was natural for students and management to have more familiarity with a training interpretation on the meaning of education. One of the great challenges that emerged in this program was to maintain continuous communication on the differences between education and training, while at the same time, not create a disruption in the partnership.

The corporate environment encourages and honors immediate application of new learning. This applied learning is the desired outcome of training programs. It was frequently necessary for University people to discuss how finding immediate application of knowledge or giving solutions to problems are not necessarily goals of education. On many occasions there were conversations with frustrated students on the importance of theory and benefits of "discovery" learning. After a few months, students did begin to appreciate the learning process requiring thinking, reflecting and problem solving in finding answers. It is possible that this surprising high degree of difficulty arising from different perceptions on the meaning of eduction was magnified by University classes being offered in a corporate headquarters. The serious problems caused by this dual meaning of education led both Corporate management and University people to question the location chosen for this program. Perhaps a convenient location outside of corporate housing would have helped students move away from their corporate thinking and toward their student roles with more facility.

An educated employee was the desired outcome of this program and whether this outcome was reached will not be known for sometime. The corporation plans to follow these students through their careers. It certainly would be interesting to find how these students' career paths compare with their corporate colleagues who had taken computer courses in one of the corporation's short term training programs.

Unfortunately, the partnership contract for this program did not extend beyond the final class. The authors recommended writing into the original agreement a continuing partnership between the two entities for long term research. There are certainly many privacy issues involved with such research but confidentiality could be built into the design. This corporation would likely have welcomed assistance from the University in their research efforts but approval on employees as research subjects was most difficult as an addendum to a contract.

Evaluation of the program was on going through structured meetings and standard student evaluation instruments. New findings on student needs and expectations guided the direction of the program. Traditional course grading procedures were also incorporated into this program. The University can be sure that students who satisfactory completed this nontraditional program have met all the traditional University standards, and the corporation has gained educated employees.

PROJECT ARETE: AN INTEGRATED PROGRAM OF BUSINESS AND LIBERAL STUDIES

Michael R.W. Bommer
Owen Brady

> Many of us have been asking, "Can colleges and universities provide both liberal education and preparation for work? Can those two major purposes be served simultaneously?" In my judgment, we have been asking ourselves precisely the wrong question. The proper question is, "Can liberal education and preparation for work be separated?" (Chickering, 1982)

Introduction

During the last decade, voices from academe as well as industry have been calling for a synthesis of business and liberal education to provide the best preparation for future professionals. Both corporate executives and educational organizations like the American Association of Colleges (AAC) and the Carnegie Foundation for the Advancement of Teaching advocated the opinion that liberal education, especially study of the humanities and social sciences, develops skills and attitudes useful, perhaps even essential, to business success. Empirical studies like Winter, McClelland, and Stewart's A New Case for the Liberal Arts (1981); Joan Stark and Lowther's work on the Professional Preparation Project (PPP) at the University of Michigan (1988); Ann Howard's "College Experience and Managerial Performance" (1986) sponsored by AT&T; and Michael Useem's Liberal Education and the Corporation (1989), confirm this jointly held view.

The American Assembly of Collegiate Schools of Business (AACSB) began studying the role of liberal education in an undergraduate business degree and promoting interdisciplinary initiatives. In January 1988, the AACSB issued a self-reflective report authored by its Task Force on the Liberal Arts. The seven business school deans on the Task Force drew heavily on the work of the PPP and on Ernest Boyer's Carnegie Foundation study, College: The Undergraduate Experience In America (1987), to formulate its report, "Habits of the Mind and Education for Business" (1988). This report emphasizes the development of intellectual processes rather than

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skills mastery, habits of mind rather than technical knowledge. It recommends that the undergraduate experience integrate business and general education as well as classroom and extra-curricular experience.

As a professionally-oriented University, we at Clarkson have always been attentive to dialogue on the role of the liberal arts in professional programs, but in this round of that discussion, demographic factors also contributed to developing an action plan. Late in the 1980's, like other institutions of higher education in the Northeast, Clarkson University, known for its professionally-oriented programs, began to experience a decline in enrollments. Faculty and administrators in the University's School of Management and Faculty of Liberal Studies saw in the debate about the relationship of business and liberal education an opportunity to develop a new program to attract a broader representation of students. Recognizing that many students with broad interests were choosing pragmatically to major in "employable" programs, we decided to develop a program that combined in a new way the liberal arts and the business components of the curriculum.

In response to this national debate over the role of liberal education in undergraduate professional programs and changing demographics, Clarkson University, funded by a three-year FIPSE grant, designed and launched Project Arete, a unique double major combining studies in the humanities and social sciences with those in business administration. The purpose of this paper is to describe and discuss Project Arete's design and implementation process. In addition, we will share some of the personnel and institutional challenges that were encountered in launching this new interdisciplinary program.

The classical Greek word "arete," connoting both excellence and virtue, captures the essence of the program which intends to educate people who will bring humanistic values into the business arena by paying attention to the social, environmental, cultural, and ethical dimension of problems. Project Arete emphasizes collaborative learning, effective communications, social responsibility, student empowerment, value sharing, co-curricular activities, and regular assessment of the program. Project Arete's curriculum involves an integrated, interdisciplinary approach to education. In addition to University requirements and requirements for the liberal studies and business majors, students take specially designed interdisciplinary seminars, taught by management and liberal studies faculty, which integrate concepts and issues in each of these fields. Students also participate with faculty in specially designed modules which integrate extra-curricular activities with personal development.

Design Process And Criteria

The design process for Project Arete was self-reflective throughout with significant interaction among the six-member team drawn from both the School of Management and the Faculty of Liberal Studies. As we debated and developed our design dimensions, we struggled toward a mutual understanding and shared language even as we continued to survey the literature on the outcomes of professional and liberal education. Project Arete's design reflects and overlaps with findings presented by the AAC (1985), an organization well-known for advocacy of liberal education, and the PPP (1988), which surveyed faculty teaching in undergraduate professional program. The AAC points to the liberally educated person's aptitude for critical inquiry, communication skills, ability to analyze values in society, as well as historical and international perspectives. The PPP summarized the most often mentioned outcomes and competencies considered important for professional success: 1) interpersonal communication skills; 2) critical thinking; 3) contextual competence--the ability to understand the social, environmental, economic, and cultural setting in which a professional practices; 4) aesthetic sensibility; 5) professional identity; 6) professional ethics; 7) adaptive competence--the ability to anticipate and adapt to changes in society and technology; 8) leadership capacity; 9) scholarly concern for continued improvement; 10) motivation for continued learning; 11) conceptual competence--an understanding of the theoretical foundations of business; and 12) integrative competence--the ability to integrate theory and practice.

The dimensions which the designers of Project Arete chose to emphasize include communication skills; individual values, goals and self-awareness; problem solving/critical thinking; management skills; multi-cultural world view; ethics and social responsibility; and student empowerment.

Communication Skills

The Arete program recognizes the centrality of language in both coming to understand problems and in developing and communicating solutions. Consequently, Arete emphasizes the development of both oral and written skills in a variety of ways: courses specific to the program, extra-curricular activities, and regular assessment by a writing coach.

Individual Values, Goals, And Self-Awareness

One of the traditional thrusts of liberal education which Project Arete foregrounds is the clarification and development of individual values and goals. As in the case of communications skills, Project Arete encourages the discussion of values and goals in a variety of contexts, both in and out of the classroom.

Problem Solving And Critical Thinking

Too many decisions in business and government focus on optimizing performance in the short term, the next quarter or the next election and, as a consequence, result in sub-optimal situations in terms of political stability, economic growth, and the enhancement of human welfare. To address this problem, the Arete program seeks to develop individuals who combine cultural awareness with critical thinking to move beyond the "quick fix," recognizing the multiplicity of alternative solutions to complex problems.

Management Skills

The Arete program provides students with specific behavioral experiences to develop the common managerial skills of leadership, planning, organizing, directing, decision making, problem definition and analysis. In addition to development of these core management skills, the program is structured to put students in managerial decision modes requiring collaboration, conflict resolution, negotiating, and synthesis.

Multi-Cultural World View

Developments in communications, social structures and economic systems have made the need for recognition of plurality and interdependence in the world. Project Arete attempts to develop an appreciation of culture and applies this powerful concept to managerial problems requiring analysis and synthesis to reach a solution.

Ethics And Social Responsibility

Project Arete emphasizes individual responsibility for decision making that is not only managerially sound but also ethically and socially responsible. Students are challenged to develop a personal ethical value system and integrate it with norms and mores of accepted ethical and socially responsible behavior.

Student Empowerment

A major goal of Project Arete is to create a learning community in which students and faculty share decision-making power. Within the classroom Arete specific courses emphasize collaborative models. Outside the class students will be involved in managing the program's resources, choosing and designing courses, and setting directions for extra-curricular activities. As future managers, students in Project Arete will have the opportunity to develop their skills and exercise their values by sharing in governing their own education.

Curriculum And Co-Curriculum

Unlike many programs which rely primarily on traditional courses to meet design criteria, Project Arete embodies its design in activities "across" the curriculum and outside the classroom, a matter we will return to later. To provide an understanding of Project Arete, we will begin by providing an overview of the curriculum which consists of Clarkson University foundation requirements, the management major, a humanities or social sciences major, and the Arete seminars and modules component. We will then discuss additional design dimensions as they are integrated throughout the program.

Clarkson's foundation courses provide students with a broad grounding in mathematics, the sciences, engineering, humanities, and the social sciences. The management major is comprised of core courses which cover the basic business functions including accounting, information systems, statistics, marketing, production, organizational behavior, finance, legal environment, and business policy. In addition, a student also selects a six-course concentration in one of the following areas: human resource management, marketing, finance, production management, information systems, accounting, or economics.

Students selecting a humanities major may concentrate courses in literature or combine literary study with course work in art history, communications, creative writing, and philosophy. For students electing the interdisciplinary social sciences major, they may concentrate courses in history or combine courses from several subject areas such as anthropology, economics, history, political science, and sociology to investigate a central theme or issue. Both the humanities and social science major may include a variety of interdisciplinary liberal studies courses.

The Arete seminar and module component consists of specially designed interdisciplinary offerings taught by management and liberal studies faculty which integrate concepts and issues in each of these fields. The Project Arete seminars (three credit hours each) are designed to bridge the gap between business and liberal studies, while the modules (one credit hour each) are designed to foster a student's personal and professional development in the areas of ethics, culture, social issues, the arts, and self-awareness, etc. In both seminars and modules, classes are small and encourage thoughtful discussion and value sharing.

Seminars And Modules

Seminar and module proposals are solicited annually from the business and liberal studies faculty. A Selection Committee comprised of faculty and Arete students evaluate the proposals and make selections for the next academic year. Examples of the seminars and modules that have already been offered are described below:

AR 150 Industrial Neighbors--Agriculture is the oldest human industry. It is one of the few industries left that still depends on the vagaries of weather and season. But today it can serve as a model for all modern industry. It mines raw material out of the earth. It refines the product and produces waste. Sometimes it produces profit for its workers. Chemicals, subsidies, commodity futures, foreign trade, computer technology, politics and many myths tangle in its roots.

This course studies the ancient and modern dimensions of the agricultural industry of the North Country. We visit a commune farm, and a huge agri-business spinach farm and a dairy farm. The course focuses on the dairy industry, still family oriented. Students watch how cows, people, machines, chemicals and market strategies turn grass into cheese. They study the impact of this industry on workers, families, and on the local, national and international community it feeds.

AR 250 Management In America: Ideologies at Work--The course provides a historical review of the development of management and labor relations in the U.S. from the mid-1800s to today. We examine issues such as the factory system, scientific management, unionization, technological change, and the rise of the managerial class from both management and labor's perspective. Attention is devoted to the values held by society at various time periods and how these values interacted with, impeded, and promoted certain management and labor philosophies. This approach allows students to analyze both the common interests of these two groups as well as their fundamental differences in view of the dominant values held by American society during the period.

Students participate in discussions, make presentations, work on a group project and write a final project paper.

AR 103 Cultural Events--During the course of the semester, Arete students attend 8-10 cultural events, participate in a discussion related to each event and keep a journal of their reflections and reactions to each event. Examples of events may include viewing a play or movie, attending a concert or lecture, visiting a museum, inviting a guest speaker or artist to share expertise or experience, etc. The last few events in the schedule are chosen by the Arete students in accord with Project Arete's stated objectives. For as many as two of the events, each student is asked to select, attend and respond to events which represent a "new" experience. Students attend or participate in these events as individuals rather than as part of the whole group. After each of the group events, the students discuss their impressions of the event, how the event affected their original perceptions or expectations, and what questions it raised. Group discussions usually begin with a review of journal entries.

AR 104 Journey Toward Wholeness--All of us during our lifetimes take many journeys, some of our own choosing, some inevitable: from life to death, from childhood to adulthood, from school to career, from potentiality to realization. Students consider their own life experiences, especially milestones, crises, significant events -- and those of others -- and learn how to reflect on these experiences to discover underlying principles of human growth and development that assist us on our individual and corporate journeys. The sessions utilize group discussion, readings, action/reflection opportunities and other exercises as well as invited guests. And throughout the module, the question is raised "How does all this relate to my future career in business and my life as a maturing adult?"

AR 201 Following The News--Following the news is a course designed to show students what they can and cannot expect to learn from careful, consistent reading of a newspaper. Over the course of this semester, students read THE NEW YORK TIMES, and follow a series of stories that they have selected. Each student is required to keep and maintain up-to-date clipping files on two continuing stories. One of these stories is entirely of the student's choosing. Students follow their second stories, which should have INTERNATIONAL foci, in teams of 3 or 4 students. The class meets once each week to discuss the stories students have been following and other stories that have attracted their interest. Class discussion and student presentations, and a final written summary focuses on the following kinds of questions: 1) what we have learned from the story; 2) what more would we need to know to really understand the story; and 3) what difference does following the news make to our understanding of the story.

AR 202 The Success of Business, The Business of Success--For many Americans, happiness is achieved by being successful. It is possible to identify three conceptions of success. There is a tradition that identifies success with the accumulation of material goods; a tradition that views success in spiritual and moral terms; and a third tradition that combines the pursuit of professional and material success with a spiritual and moral attitude toward the world.

This course evaluates these three traditions and examines the extent to which they influence contemporary notions of success both at the corporate level and at the employee level. Students analyze the strengths and weaknesses of each conception to be better able to place their personal conceptions of success within one of these traditions. Students then research local businesses and interview employees in terms of their respective conceptions of success. In the process, students are able to identify their own conceptions of success within the context of the sort of business profession they would like to pursue.

Communication Skills

As mentioned earlier, a number of design dimensions are met through activities outside the traditional course structure. To help develop communication skills, Project Arete makes use of the faculty member who oversees our Writing Center as a Writing Coach. Apart from course requirements, students' progress in written communication is monitored and fostered by the Coach. Each semester students meet with the Coach to file representative papers in a writing portfolio, to review writing problems, and to set goals for the coming semester. The Coach generates a report which is placed in the students' advising file.

Empowerment

To foster student empowerment, Project Arete seats several student representatives on the program's Steering Committee, which sets and reviews policies and curriculum. Furthermore, all students are involved in planning a special Orientation program for freshmen focusing on team and identity building as well as a year-end retreat which critically examines the year's activities in light of the program's goal and sets future directions. Students and faculty also sit together to select or solicit Arete courses and modules. Finally, students take the initiative in selecting and planning a program of co-curricular activities.

Advising

Because frequent contact between faculty and students breeds commitment and provides students with professional role models, Project Arete assigns an advising team, composed of one business and one liberal studies faculty member, to each student. As one might expect, faculty and students meet formally to transact the normal academic functions of advising. Students also meet with faculty in more informal setting, providing them with the opportunity to get to know each other outside their traditionally structured roles. Finally students write a personal statement each year to their advisors, setting goals and charting personal growth. Each advisor in turn writes a response and meets individually with students to discuss their goals and personal growth.

Co-Curriculum

Project Arete also recognizes the role of co-curricular activities in personal and professional development as the AACSB recommends in "Habits of the Mind and Education for Business" (1988). Taking advantage of local resources and events, Project Arete aims to help students develop life-long interests as well as to sharpen their understanding of their future profession. While they seek to develop the skills and abilities that lead to career success, the program also tries to help them see that the "good life" is lived and made from resources of our local communities. While Potsdam is a small, upstate New York village, there are four colleges and universities in proximity to each other. Thus, the cultural and natural resources available locally are manifold: art galleries, theaters, museums, the Crane School of Music, libraries, film and speaker series, a large international population, executives-in-residence, the Adirondack Mountains. In addition, Clarkson is within an easy drive of two major Canadian cities, Ottawa and Montreal. Students and program directors work together to choose or organize events that fulfill one or more of the program's design dimensions. Recently, students initiated the practice of "family" dinners once a month, inviting faculty guests, and discussing Arete business. Currently, they are planning to petition the student government for recognition as a society or club. Finally, students have been active in helping to recruit new students: serving as University tour guides, writing letters to prospective students, helping design promotional literature, visiting their home high schools, and hosting visiting high school students interested in Arete.

Implementation And Challenges

In Project Arete as in life in general, most problems revolve around people and money. While we have a core of six to eight committed faculty, one of the biggest challenges we face in institutionalizing Project Arete seems to be in identifying more faculty to teach the interdisciplinary seminars and modules. Money is apparently an insufficient incentive to generate a large number of interdisciplinary course proposals from which to select. While we have received multiple course proposals, the number has not matched our expectations. The pressures of tenure and promotion weigh heavily on faculty in both business and liberal studies. Quite frankly it is safer to pursue known research and disciplinary paths on one's way to security.

As we move to institutionalize Project Arete, we will begin to explore additional incentives to stimulate the development of Arete courses as well as ways in which to retain an Arete course as a regular offering. For example, release time and a faculty seminar to discuss interdisciplinary approaches are being discussed.

We also recognize that we need to promote the concepts involved in collaborative learning among both students and faculty, since, in many ways, the teacher-student dynamic is as important to the program's goals as interdisciplinary course content. Both faculty and students need to adjust their teaching and learning styles if Project Arete is to achieve its goal of establishing an active learning community. Outside Arete seminars and modules the traditional lecture-recitation mode of instructional delivery still dominates, clearly centering authority in the faculty member and encouraging passive learning on the part of students.

While empowerment is a central value of the program, despite a number of significant successes, students have not always taken advantage of the opportunities to take charge of curricular or co-curricular matters. Empowerment involves initiative and responsibility, both of which require special effort and occasional sacrifice of individual ends for communal ones. A clear example occurs in the area of co-curricular activities. Initially, the Directors had encouraged students to evolve their own structure for planning activities. While a structure emerged, planning did not always occur. Consequently, in the freshman year, the Directors assumed responsibility for directing a module which provided a familiar class-like structure in which to plan co-curricular activities. The result has been that this year's freshmen seem to have a stronger group identity and a desire to plan more activities.

In terms of the curriculum, refining the modules themselves and bringing students to a clearer understanding of their enrichment function remains a challenge. While Arete students do stand apart from many Clarkson students by virtue of their commitment to becoming "well-rounded," they too are affected by the pragmatic, vocational mindset that still permeates the institutional culture. Consequently, loosely organized, informal learning experiences like the modules, which are offered on a "pass-no entry" basis, do not always receive priority. Through a more pointed orientation program and a new freshman module led by the program directors, we have, however, made some progress in this area.

Two other challenges involve recruiting new students and placing graduates. Having invested considerable energy in introducing Project Arete to high school counsellors in several states and in providing personal attention to each applicant, the program directors still encounter the problem of trying to diversify Clarkson's image in the public's mind. As a professional school known primarily for and dominated by its engineering programs, Clarkson is not widely perceived as a school for business and liberal studies despite the exceptional faculty found in those areas. And even when students are attracted to Project Arete, the high total cost of attending Clarkson has driven a number of fine students to seek a less costly alternative in public colleges and universities. While we feel we have made some significant progress, we still need to do considerable work to present Clarkson's strengths, apart from the traditional one in engineering, to prospective students and to find scholarship support for promising students.

In terms of job placement, we foresee some difficulties stemming again from Clarkson's reputation as an engineering school. While we have an excellent Career Planning and Placement Office, the majority of corporate recruiters flock to Clarkson to seek graduates in technical areas. Working with the placement officers, we need to plot a strategy to bring more recruiters to campus who seek graduates in personnel and service areas is a priority.

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THE LANGUAGE OF WORKPLACE LEARNING: CONGRUENCE AND CONTRADICTION IN A COMPANY SPONSORED DEGREE PROGRAM

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Catherine E. Kirby

Introduction

Workplace education programs are daring, but the rewards of employee/corporation partnership are many. Rather than hiring workers with advanced degrees and special training, companies may be able to "grow their own". These individuals will have not only the necessary skills, but also the in-house experience necessary to understanding of the company. Through such programming, employees also maintain a degree of loyalty to the company.[1]

Learners from such a program served as a focus group to assess the quality of the program and to identify areas for improvement in the future. Participants' comments revealed both congruence and contradiction of outcomes were present in perceptions of the program. Prospects for enhanced job-roles and advancement were outweighed by feelings of personal satisfaction and accomplishment, revealing a contradiction between the company's organizational objectives and learners' anticipated personal outcomes.

Objectives of Workplace Education

Workplace Learning in the United States

Continuing education for corporate clients is essential to prepare corporate managers and executives for a complex, competitive environment, and, more broadly, to restore the position of the United States as an international economic leader.[2] Support for this belief among executives is revealed in a recent report claiming such training programs account for two-fifths of all US investment in human capital, and such investment encourages greater employee loyalty. But this report makes some troubling observations as well:

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> Low income employees, who are generally poorly-educated, receive little training from their employers;
>
> Both nonwhite and female employees are less likely than white male employees to benefit from company-sponsored training, however, females are more like to enroll in training programs even without employer sponsorship.[3]

Many human resource professionals are reluctant to commit to dedicated programs for employees. Some may even fear that once employees have an advanced degree, they will take that credential and find another job. These data suggest corporate investment in workplace learning is limited to the already well-educated to retain well-paid employees. The effects of ignoring traditionally under-served workers, combined with companies' use of disjointed incrementalism in the delivery of continuing education, is little more than maintenance of the status quo. The under-served who do seek out education, find it outside the company. In other words, those who hold better positions succeed to increasingly better positions while those less well-off remain less well-off. In order to take advantage of the opportunities available through workplace learning, companies need to plan programs and target audiences based on more than cost-benefit analysis. One such well meaning attempt serves as the case for this study.

An Attempt to Develop Management From Within

A communications technology company decided to implement a high-quality, in-house Masters degree program for selected employees from two company work-sites. Its goal was to prepare individuals for management positions within the organization. A program was designed to meet the organizational needs of this company, as well as the developmental needs of the employees. The primary objectives of the program were to prepare selected employees to assume leadership roles in solving major organizational problems, and to train management generalists, not technical specialists. Most of the targeted learners, selected from among technical personnel, were judged to lack the kinds of interpersonal skills required to deal with wide-ranging management issues confronting the organization. The AU/NTL Masters of Human Resource program was selected because it met expectations for program quality, applicability to the company's needs, flexibility in scheduling, and on-site delivery.

The Focus Group and Its Outcomes

Midway through the program, a focus group interview[4] was used to assess participants' perceptions of the quality and value of the program to date. The focus group format stimulated new ideas that may not have been revealed through individual interviews or from survey instruments. The power of focus group interviews is a result of the degree of openness and candor permitted among individuals already familiar with one another, who share certain experiences. The group provides "support for its members to express anxiety-provoking or socially unpopular ideas". Many times informants need help sifting through information they have; the focus group format allows the facilitator to assist members make sense of what they have perceived.[5] This format was also consistent with the objectives of the program itself and the changes it was designed to promote among participants. It was essential to employ as comfortable a data gathering technique as possible while generating as much--and as varied--information as possible.[6]

Volunteers from the class met to discuss the strong and weak points of the program, and its relevance to their work. Also explored was evidence change in work roles resulting from participation in the program.

One organizational objective, meeting the developmental needs of the employees, seems to have been clearly met through the program. Focus group data revealed many of those pursuing the degree viewed it as an opportunity for self-development. Most participants agreed with the sentiments expressed in these statements by group members:

> If you look at the Meyers-Briggs results, you see an awful lot of T's up there. We're thinking people. That's what we do. This feeling side of us is quite often neglected. It's probably one of the best things I've done for me.
> - Evan, second-level supervisor

> I find this learning experience particularly stimulating. I think the esprit de corps established in the class very enjoyable. Even apart from getting a Masters degree, this is very entertaining.
> - Mark, first-level supervisor

> The touchy-feely nature of the program was one of the things that drew me to it.
> - Frank, first-level supervisor

Another objective of the program was to prepare technical personnel to assume leadership roles in the organization. This objective has been met if by "leadership" one means understanding the value of developing group cohesiveness and a stronger sense of loyalty to the company.

> I'm here because I want to enhance my people skills. My current job is technical, and I don't get the kind of interaction in that position as I would in a true management position. In the event that I move into a management position, I would like to have those skills already.
> - Lisa, first-level supervisor

> The best thing about this program is that there is an understanding, a team effort, the idea that we're all in this together. It's also made me feel a lot more positive about my company. It's not just take, take, take; they're giving something back and the company is a partner in this.
> - Evan, second-level supervisor

> I think part of the experience in the program is a maturation process. We're not dealing with subject matter that offers millions of absolutes. There isn't, in fact, one "right" answer to any given question.
> - Mark, first-level supervisor

Each participant acknowledged the company's contribution and expressed gratitude for having the opportunity to participate in a company sponsored program.

But the data also told another story. Contradiction emerges in comments regarding the composition of the learning group. While a primary program objective was to prepare technical personnel for future management positions, some animosity seems evident in comments noting the absence of certain nontechnical personnel in the learning group.

> What I would like to see is more diversity in the group. We have the same logo on our ID cards, we all kind of work in the same environment, but what's missing are a lot of the other people who work for [the company]. There's nobody here from marketing, so there are many facets of [the company] that are not represented. We might think that we've got a lot of diversity in the group because some of us are technical and some are nontechnical. To me, it's a matter of function: we're all involved in the same process.
> - Bill, first-level supervisor

This comment is representative of a sense of non-connectedness to the larger organization felt among participants. Emphasis on function suggests that certain "functions" may be more "of the organization" than others. Why wasn't marketing represented? Is it because individuals in marketing are considered inherently better--or worse--candidates for management positions than technical functionaries? If one of the organizational objectives was to prepare leaders to make company-wide decisions, then where was the rest of the company?

There is also a sense that the functionally-specific composition of the learning group inhibited interaction and restricted learning.

> I don't necessarily [feel comfortable in this group]. I have a great deal of reluctance to speak in class. Being among my [professional peers] creates a lot of discomfort for me.
> - Hazel, second-level supervisor

> I think if everyone here were not from [the company] I could get more issues out there that I'd like to deal with than I can with this group. I cannot forget the fact that I go back to work on Monday. It's a reality.
> - Bill, first level supervisor

When asked whether their motivation to be a part of the program was the applicability of the degree in the workplace, informants' comments suggest that personal development was one of their foremost considerations.

> It's going to make me a better person -- and who knows, I might make a buck off of it. It's the company that pays the tuition, but this is something I'm going to own and take with me to the grave.
> - Frank, first-level supervisor

> At the point I found out about this program, I had already made the decision [to get a Masters degree]. In fact, at the point I was considering this program, I was already accepted by George Mason University.
> - Bill, first-level supervisor

This contradiction suggests the company goal of retaining employees through professional development programs may be met not through prospects for new management responsibilities, but as a result of employees new perspectives of themselves as individuals.

Contradiction emerges in comments related to the program's quality. Individuals' perceived program quality potentially being compromised as a result of the structure of the program itself. Comments suggest that some work needs to be done to realize a model program suitable for recreation at other company sites. For example, conflict between the academic and applied expectations of the program came under scrutiny.

> One time I got comments on a paper that said it wasn't in an academic style. I don't want to be an academic person, that's not what I want to be. So from that perspective it seems to be a deviation from the "light" structure of the program.

> Sometimes it's like I should be here because we have these consultants that teach from a business perspective; other times we have an academic person who has an academic orientation. So it's not fair to switch back and forth.
> - Lisa, first-level supervisor

Such uncertainty creates a "satisficing perspective" among learners to their academic work.

> I've adjusted to the pattern of not knowing, and I've decided I've found a pattern that seems to be working and I'll stick with that. I don't know if that's what they want, but I don't care anymore.
> - Doug, first-level supervisor

> Anything I can come up with will suffice. I don't see them holding shotguns to our head to do this APA style.
> - Paula, first-level supervisor

Convenience of on-site programming, a major selling-point in continuing education, seems to be over-rated, according to many of the opinions expressed by the participants.

> I find having the course on-site to be a problem. The fact that the course is held where I work, I don't have time to disengage myself from the job and enter the classroom with a fresh mind.
> - Hazel, second-level supervisor

> I think it's good to come on campus [rather than meeting at the work-site]. It's disruptive when someone comes into the class to deliver a telephone message.
> - Ralph, second-level supervisor

> I think you should hold the classes at each of the sites. The people from [the on-site class location] don't have a chance to unwind by leaving the office like [those of us from the other site].
> - Laura, first-level supervisor

An equal number of comments, however, supported the on-site location. Most of these voices, however, were those of participants from the site where the classes were not held.

> I don't like the commute [to campus]. For me it's another 3 or 4 hours on top of an already long day. I don't personally get a whole lot out of being on the AU campus.
> - Doug, first-level supervisor

> They obviously shouldn't have the classes downtown; that's not convenient for any of us. But it might be nice to try different locations [near the work sites]. It might be nice to try different things.
> - Aura, first-level supervisor

Using Contradiction in Marketing Continuing Education

Two particular issues of contradiction present obstacles to the continuing educator who visits a company. The first challenge for the continuing education professional is to bring together programs and people in order to meet the needs of both the company and the employee. At the same time, it is just as important that both the company and the employee have clear understanding of what they are trying to accomplish. In order to reap the benefits of an on-site program, the company sometimes may need to tie program participation to job enrichment or job advancement. In other cases, the company may need to recognize the organizational benefits accruing from individuals' self-development through learning which is not task-specific.

This process can begin as early as new employee recruitment. Companies presenting company-sponsored education programs which allows them to pursue an advanced degree can be a real incentive to prospective employees. Listing information about on-site education programs as part of employment advertising, together with other benefits information can be a powerful draw, as well as saying something about the commitment a company is willing to make in personnel.

Companies which have identified groups having the potential to assume management positions, a company-sponsored education program presents many opportunities. Participants will be developing skills while becoming accustomed to working together. For companies who do not expect to promote from the ranks, a company-sponsored education program can be an effective way to encourage employees to expand the scope of their present jobs. Presenting employees with new information and helping them learn new skills may encourage them to adopt a fresh perspective on their work. Company recognition may cap off the program, perhaps a completion or graduation ceremony attended by officials from both the university and the company.

The second challenge lies in assisting the company in choosing the best program for the audience. In technical training, the task usually consists of working with management and faculty members from appropriate disciplines to identify areas for program concentration. The goal of many management training programs, however, is to move technical people into a supervisory role. In presenting these program options, it would be worthwhile to become familiar with programs available through your school which emphasize people skills and offer these programs as an alternative to those which may concentrate on the quantitative component of management.

The company-sponsored degree program described enrolled technical staff members in a Masters in Human Resources degree program. While all stated that they enjoyed the coursework and found the professors interesting, each also expressed some frustration at not being able to clearly define what was expected of them. Some complained that the "right" way of doing things varied from professor to professor. Some felt pressure to generate the kind of class discussion the professor was looking for without knowing what it was. At last, one member of the group concluded that they were dealing with a subject that had no absolutes. This group was learning the theory behind management and organizations but they were also learning how to manage ambiguity.

The continuing education professional can assist companies by informing them of different types of programs available and also what expectations each carries. It may also be valuable for participants to come from different units within the company. In addition to having project managers, perhaps there are marketing, human resources, or line personnel who could benefit from a particular program. A little diversity ensures that class discussion stays lively and provides the opportunity to learn about other aspects of the company. If participants do not see each person in the group every day at work, they may feel more comfortable speaking out in class.

Conclusion

This examination of participant perspectives of a workplace learning program suggests that benefits of such programming extend beyond the confines of economic rationality. While organizational competitiveness must be a major concern for human resource managers, to focus only on technical skills at the expense of individual opportunities for personal development is to miss a large portion of the benefits which accrue from company-sponsored learning programs. Recognizing employees' need for self-development can build loyalty to the organization at all levels, especially among the traditionally under-represented.

Endnotes

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DEVELOPING DUAL DEGREE PROGRAMS IN HOSPITALITY MANAGEMENT: A SURE WAY OF INCREASING COOPERATION BETWEEN MAINSTREAM UNIVERSITIES AND PREDOMINANTLY BLACK COLLEGES

Ben Henry
Polly Buchanan

Before discussing dual degree programs and the benefits of such inter-institutional agreements, we need to review briefly the definition of terms referred to in this commentary. We will first describe articulation agreements, and liberal arts colleges before elaborating on the dual degree program being established at our institution.

Articulation agreements between institutions of higher education have existed for many years, usually between two and four year schools. Such agreements often provide students with an initial college experience at a smaller institution, close to home where the adjustments to college life and its academic rigors can be gradually assimilated. At the end of the two year associates degree, the student transfers to a four year institution where a Bachelor's degree is completed following a pre-arranged articulation agreement that specifies courses to be taken and graduation requirements. Such arrangements may be called "two plus two" agreements because two years is spent at each institution.

The mission of the liberal arts college has traditionally been viewed as providing a broad based curriculum with the knowledge required of a well rounded, educated person.[1] A more modern definition of a liberal arts education includes concepts of broadening awareness of the world, transmitting and preserving cultural heritage, learning to think critically and clearly, and developing a sense of critical awareness. Liberal arts degrees usually include written and verbal communication skills, basics in science and mathematics, assorted arts and humanities classes including literature, religion and philosophy plus social science topics such as sociology, economics, government and history.

But liberal arts education alone may be viewed as impractical in a society where students often view their primary purpose in college as the completion of a professional degree leading to quality employment. Gamson[2] noted a comment by Franklin: technical education helps people do things

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well, and liberal education helps them understand why. With increased competition among schools to recruit students in a decreasing cohort of eligible candidates, plus increasing student interest in being professionally trained upon graduation, liberal arts institutions have been attempting to add more professional specializations to their courses of study.

However, professional education can be costly because many programs require laboratory facilities and specialized faculty with recent industry work experience. Most small liberal arts colleges simply can not afford this expense. Dual degree arrangements between institutions may be a solution for this dilemma. Dual degree programs involve an articulation hybrid. Students attend a liberal arts college for 2 1/2 years, taking basic studies courses and any others that will transfer toward a minor. Then, the student transfers to a four year public university for 2 1/2 years to take professional courses required for a specific major plus any remaining courses needed to complete the degree. Thus, in a five year period, the student receives two degrees; a Bachelor's degree from both institutions. Courses taken at each institution transfer to the other to provide the needed credit hours to receive each degree.

Dual degree programs in the United States are increasing in number. One successful program is the dual degree engineering program in Atlanta at Georgia Institute of Technology (GIT) and Morris Brown College. GIT offers a Bachelor's degree in engineering, Morris Brown does not but has students desiring such a degree. Students who want to pursue this course of study must satisfy the college's general education requirements with the exception that only 100 credits hours are required instead of the traditional 124. There may be unique features of each dual degree agreement such as substituting six credit hours of computer science course work for the six hour foreign language requirement at the liberal arts college.

A number of universities have considered the development of dual degree programs in hospitality management. One such institution is the University of Houston which convened a meeting in 1989 to discuss such a possibility with the following predominantly black institutions; Texas Southern University, Grambling State University, Prairie View A and M University, Southern University of Louisiana, Tennessee State University, the University of Arkansas at Pine Bluff, and Tuskegee University. The interest in pursuing such articulation agreements was very strong among the members present at this meeting.

A collaborative educational effort that resembles in part dual degree agreements was reported by Skeel[3] This involves a teacher education program between predominantly white Peabody College of Vanderbilt University and Fisk University, a historically black institution. Fisk students desiring teacher certification attend Peabody for three semesters during their junior and senior years, returning to Fisk for the last semester of their senior year. They graduate with only one degree from Fisk but have completed more than 37 percent of their course work at another institution. The benefit to students are obvious in providing a degree that they desire; the benefit to the institution is in the saving of scarce resources.

An articulation agreement that involved predominantly white and black institutions in the same geographical area in Virginia was presented by Mohr and Sears[4]. The primary purpose of this articulation agreement was to avoid unnecessary duplication of programs and facilities at both institutions. This resulted in an overall financial savings and yet provided needed educational programs for students within a designated region.

Advantages of Dual Degree Programs

There are many advantages to dual degree programs. Most minority schools suffer from a lack of adequate resources and a dual degree program encourages a sharing of resources between the minority school and the larger, better-endowed, mainstream institution. It illustrates the concept of cost effectiveness by not duplicating costly educational facilities. The money saved in not providing program equipment, laboratories and faculty can be used by the minority institution to improve the quality of other academic offerings, support facilities or to introduce additional degree programs.

Another advantage of dual degree programs is the improved marketability of minority graduates through the name recognition process. For example, Eastern Michigan University (EMU) is a large, state regional university of 26,000 students with a well-deserved reputation. A minority student getting a degree from EMU under the dual degree program may compete on a more equal footing in the job market after graduation.

Yet another advantage of dual degree programs involves the long range goal of increasing minority participation in graduate work. A dual degree program in hospitality management, for example, is likely to encourage minority graduates of the program to seriously consider attending graduate school because they have been exposed to graduate students and graduate faculty at the larger, state university. Minority students will experience a variety of faculty interactions as well as associations with a large number of students with a diversity of ethnic and social backgrounds.

Dual degree programs may also encourage faculty exchange programs between the two institutions involved, and may also encourage joint research projects between minority and white academicians. In addition, having dual degree programs in place tends to assist in attracting funding from a variety of sources. Today, many foundations and funding agencies tend to look more favorably on partnership ventures rather than on individually presented proposals.

There may also be a motivational advantage to a dual degree program. It could be argued that spending 2 1/2 years at one institution and 2 1/2 years at another tends to relieve the monotony and boredom of spending the entire four years at one school. This could encourage a higher retention rate among minority undergraduates. Related to this issue is the fact that transfer students tend to have higher retention rates than students who attempt a degree at one institution. This fact was documented in a study conducted by one of the authors at Morris Brown College. Retention rates for four year hospitality management students was 73 percent while transfer students maintained a 100 percent retention rate. The overwhelming majority of the transfer students already held an associate's degree which likely contributed to their dedicated efforts to complete their education.

Besides offering students a unique opportunity to earn two degrees in five years, another advantage surfaces for black liberal arts students. When a black student attends a predominantly black college, he or she is primarily exposed to a black environment. Upon graduation the student will most likely be recruited and interviewed by white males from predominantly white organizations. This fact is noted by Jencks and Riesman[5] who stated that the black graduate who hopes to enter and advance within a profession will want both the educational credentials and the training of a predominantly white national university. This allows these graduates to compete with whites on relatively equal terms in the work world. These authors also believed that the "environmental fit" problem may be more acute for students who have only attended all-black colleges compared to those who have attended predominantly white schools. Those who have attended predominantly white institutions will already have shown that they can compete with whites academically and that they can succeed in a predominantly white environment. From a recruiter's point of view, such a student appears to be less of an employment risk because there is a proven record of success. He or she will be better prepared to enter predominantly white professional organizations.

As our world becomes more global and educators attempt to instill cultural sensitivity in students, a dual degree program encourages ethnic mix in the classroom at the predominantly white institution. Both black and white students will benefit from exposure to each other by developing academic and social relationships. In addition, the large university will attract foreign students and others with diverse ethnic backgrounds that will provide additional cultural experiences for both black and white students as they learn to appreciate human diversity.

The larger public institution also benefits from dual degree programs by increasing its population of minority students, an objective often included in the goals of colleges and universities. By establishing dual degree articulation agreements, universities can provide a more stable flow of minority students from a dependable source.

Disadvantages of Dual Degree Programs

There are disadvantages to dual degree programs. Some students may argue that five years is far too long to stay in college. They want to enter the job market as soon as possible. Also, for students who must earn a major portion of their living and educational expenses, extending their college years from the normal four to five is not attractive. The availability of scholarships for the fifth year could be a solution to this problem. Also, most black colleges...primarily those associated with the United Negro College Fund, have substantially lower tuition fees than larger universities, especially when out-of-state rates apply. Thus, the dual degree student may find that the cost of education for the last 2 1/2 years at the predominantly white school is prohibitive. Scholarships may again solve this problem.

Some students may ask why they should attend the black college at all. Why not enroll initially at the predominantly white university? This may be appropriate for some students, but many black people feel that attendance at a predominantly black school is crucial to the maintenance of black culture and values. Development of "roots" becomes important to the overall maturation of black youth in the diverse culture we live in today.

Another disadvantage of dual degree programs is the possibility that the degree and the courses from the minority institution will be perceived as inferior to those of the degree and courses taken at the mainstream institution. If this is merely a false perception, proper marketing of the dual degree program should counter this idea. If the perception can be verified by lower student performance after transfer, perhaps tutorial support services will resolve the problem. Such services are generally available free of charge at most large universities. If not, upperclass mentors within a major could be identified. These student mentors could assist the black transfer student in tutorial activities or could locate needed assistance. One could argue also that the release of funds brought about by the introduction of a dual degree program could go into the academic enhancement of the minority school's degree program.

The last disadvantage that could be presented involves the minority institution becoming too dependent on the dual degree arrangement...never finding it necessary to develop its own professional program later on. This dependency syndrome could be overcome by establishing agreeable wording in the original articulation agreement. A time line when the minority institution would develop its own professional program could be included. Conversely, there might not be a need for such concern. Financial constraints are plaguing all institutions, black and white, large and small. Dual degree programs do provide a more efficient use of resources for both black and white institutions.

The Two Sides of the Dual Degree

Installation of a dual degree articulation agreement is currently being formulated between and Eastern Michigan University's Hospitality Management program and **Barber-Scotia College**, a predominantly black liberal arts college located in Concord, North Carolina. It has a student body of about 400 students. **Eastern Michigan University** is a regional state university located in Southeastern Michigan. There are over 21,000 undergraduate students studying in over 300 different majors, each providing vocational training in some form. Many of the courses of study require off-campus work experiences before graduation in the form of internships or cooperative education requirements. The Hospitality Management program requires several laboratory courses which are taught in various facilities on campus including the foodservice and housing (dormitory) operations. The program also requires two 600 hour cooperative education experiences and includes 225 hours of off-campus work in an internship as a manager-trainee in a hotel or restaurant operation.

The five semesters spent at the liberal arts college will include the following courses required in the Basic Studies portion of the Hospitality Management program at Eastern Michigan University.

BASIC STUDIES - (55 credits)
I. Symbolics and Communication
- English Composition
- English elective
- Speech
- Mathematical reasoning
- Computer course

II. Science and Technology
- Biology
- Organic Chemistry
- Psychology

III. Social Science

Government
History
Economics (macro)
Economics (micro)
Cross cultural or international course

IV. Arts and Humanities

Two literature courses
Philosophy or religion
Art, music or theater arts

Physical education - 2 courses

Management Minor - (21 credits) Consider availability of:
Principles of Accounting
Principles of Marketing
Organizational Behavior
Business Communications
Personnel Administration

Cooperative education (600 hours of work experience
in any hourly foodservice or hotel position)

After transferring to Eastern Michigan University, the liberal arts student will complete the following courses during the subsequent five semesters.

Hospitality Management Major - (50 credits)
Introductory Foods
Introduction to the Hospitality Industry
Nutrition
Legal Aspects of the Hospitality Industry
Food Systems Management I (Lecture & Lab)
Food Systems Management II (Lecture)
Financial Management in Hospitality Management
Commercial Purchasing
Hospitality Industry Marketing
Seminar in Hospitality Management
Hospitality Management Internship
Cooperative education #2 (600 hours of work
experience in a supervisory position)
4 Hospitality Management elective courses
1 Departmental elective (not in Hospitality Mgt.)

Management Minor - (21 credits)
Complete any courses not available at other institution

The student who completes the above course work will have a Bachelor of Arts degree from Barber-Scotia College and a Bachelor of Science degree in Hospitality Management from Eastern Michigan University. Having two degrees will be a real strength for the graduating black student, especially in the field of Hospitality Management where black managers are in short supply and in great demand.

It is hoped that this presentation has provided information on the pragmatic and humanistic advantages of developing dual degree programs between predominantly black colleges and mainstream universities. While not a common arrangement as yet, such agreements will hopefully prove to be a cost effective and creative inter-institutional venture while providing distinct benefits for students and both institutions.

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"TWO-PLUS-ONE-PLUS-ONE" THE ACCREDITATION DILEMMA IN PROFESSIONAL DEGREE PROGRAMS

Mark T. Hicks, Sr.

Degree Completion in Kansas

In the last few years, community colleges in Kansas have been espousing a mandate that has two parts, one of which has wide ranging implications for four year college programs in the state. This mandate is that community colleges will (1) do all they can to insure employment or trade opportunities for their graduates and/or (2) do all they can to insure that baccalaureate degree completion opportunities are made available to associate degree graduates.[1] It is the latter part that will occupy our time in this presentation.

Regents Schools in Kansas

It might be helpful to briefly describe the higher education system in Kansas. The Kansas Board of Regents oversees the regents institutions in the state. These are somewhat two-tiered, with the University of Kansas, Kansas State University, and The Wichita State University toward the top and Emporia State, Ft. Hays State, and Pittsburg State Universities just below them. However, all of the above are regents institutions. The difference is only a matter of degree of emphasis and support. Various ones of these universities have off-campus and other-campus sites for some of their programs and colleges. They also have provided access to programs for adult learners in the state by means of off-site location programs, video-based courses, TV courses, correspondence courses, evening, weekend, and summer programs.

Private Liberal Arts Colleges

In addition to these state schools, there are the private, not-for-profit colleges and universities in the state. Each of these has its own operating functions and its own board of trustees. Some of these colleges also happen to be junior colleges. Several of them have graduate

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degree programs. Many of these schools are in one or more of several kinds of associations together for both academic (Associated Colleges of Central Kansas) and/or for athletic and interscholastic purposes (Kansas Collegiate Athletic Conference).

Kansas has a long history of private, liberal arts colleges. They have usually, but not exclusively, represented the efforts of religious groups that have predominated in the state. They have generally had a reputation for quality and adherence to the broad, liberal arts tradition, both in terms of programs and in content. They have also tended to maintain a "traditional" model for delivery; that is, 18 to 22 or 23 year old students in residential settings. That is not to say that there have not been exceptions to these descriptors, but these characterizations have generally held true, that is, until recently.

Demographic Change

In recent years, the demographics have begun to change rather sharply in Kansas. This is due to the fact that there are not as many "traditional students" in the pool. Because of this, there is greater competition among all of the four-year institutions for a smaller and smaller traditionally-aged population. One college recruiter in the state described the situation as being like a pack of dogs fighting over scraps. These circumstances have led more Kansas colleges and universities to focus on adult learners as a source for recruitment.

For fear that a completely negative impression be left that these schools are totally given to institutional maintenance and self-serving, we must hasten to add that adults themselves have increasingly turned to these colleges to have their many needs met.[2] The outcome has been an explosion of all kinds of opportunities for adult learners at both state and private colleges: night programs and classes; weekend programs and classes; modular programs and classes; distance learning programs; degree completion programs; experiential learning credits; contract degrees; etc.

Community Colleges and Private Junior Colleges

And last, but not least[3], there are the schools in the community college system. These schools are operated from the local county or community under the aegis of the State of Kansas Department of Education.[4] They are open to providing activities ranging from traditional two-year associate degree programs, to various kinds of continuing and vocational education. Some of these schools have residential campuses and some of them do not. They have long been a feeder source for four year colleges in the state.[5] As we mentioned in an earlier section, there are also a few private junior colleges in Kansas, operated in much the same fashion as the private, four year colleges and graduate schools in the state. The demographic shift that has occurred in these schools has meant the aging of the population there, too.

The problem with this situation is that most of the older students are left with jobs and families in the local community and cannot move off to a residential campus to complete baccalaureate programs. It is for this reason that these community colleges have been working long and hard to develop cooperative, "two-plus-two" articulation agreements with four year colleges in the state. Some of these community colleges may have as many as a half dozen arrangements with as many schools at any one time.

Kansas Colleges and Degree Completion

All of the colleges in Kansas, both state and private, have participated in providing adult, community college graduates with programs for degree completion on their campuses. One of the models that has been used, based on the above stated mandate for community colleges and the demand at the four year college level from adult learners, is the "two-plus-two" degree program. This model is one in which the four year institution articulates a degree program with a community college to provide the last two years of a particular four-year degree on that community college campus, usually at times and in formats accessible to adult learners. This is the model which allows students, particularly adult learners, to reduce commute time and also to work around their family and work schedules.

In return for the four year school providing the program (the four year school is responsible for furnishing the instructors, administrative services, and most, but not all, support services), the community college provides the space for classes and a limited number of classroom supports. In some cases, they also work with the four year school to provide library and media services. Again, the community colleges see this as a part of their mandate.

Bethel College

Bethel College is a four year liberal arts college in North Newton Kansas, affiliated with the Mennonite Church (General Conference), with college accreditation from the North Central Association of Colleges and Schools. Among its degree program offerings are professional degrees in nursing, social work, education, and business. All of these programs, with the exception of business, are subject to their various, professionally-related accrediting bodies. Although the concept of 2+2 degree programs is approved in general by the North Central Association, this concept is not necessarily a fit with the criteria of the professional degree accrediting bodies. They are more reluctant to allow a complete form of this kind of activity for a number of reasons. Degrees in education, nursing, and in social work do not easily adapt to the 2+2 model.

For nursing programs the main problem may be the clinical component which accreditors are reluctant to allow other than with very close supervision by the residential faculty. However, some programs are now being allowed with video-based components and off-site 800 telephone number interaction with resident faculty. However, the problem remains that there is a great emphasis on a campus-based liberal arts component for these programs. Therefore, nursing accrediting bodies are saying that at least the liberal arts component of a nursing degree has to be completed on the residential campus, thus eliminating the possibility for a true 2+2 program.

Education and social work accrediting bodies are also reluctant to approve true, 2+2 programs for the last reason cited in the nursing programs and more. Education accreditors are concerned that students have a chance at professional socialization with their peers in the program and also that there be proper supervision of practice teaching from the resident faculty. Of concern to social work accreditors is the fact that much of the last two years of a degree program is, in fact, the greater part of the major, and the only time the students will have to interact with resident faculty. In addition, a large number of the courses are process oriented and interactive in nature, and, again, the accreditors are concerned that the students have the opportunity to have that interaction within the larger element of all the majors in the field on the resident campus. Again, this has to do with "professional socialization."[6]

For all of the programs, one of the issues for the North Central Association as well as for program accreditors is access to proper library/media facilities with adequate holdings for the degree major. We are aware that most of the degree completion programs in the state of Kansas involve agreements between articulating schools for libraries on the community college campuses to add holdings to support the degree being completed. Again, they see this as a part of their mandate. In addition, all these programs involve active, inter-library loan arrangements.

Another matter of concern for the North Central Association is that of the ratio of adjunct teachers to full-time and tenured faculty. Due to the limited resources available at nearly all colleges in Kansas today, there seems to be a limit to the number of teachers they are willing to give up time to degree completion programs.[7] There are just not enough full-time and/or tenured faculty to go around in degree-completion programs in Kansas colleges at the present time.

Bethel College Social Work Program

Bethel College in North Newton, Kansas has a baccalaureate social work degree program accredited by the Council on Social Work Education of the National Association of Social Workers. It provides for the opportunity for students to graduate with a baccalaureate either in arts or in sciences in social work. Given the strong liberal arts core curriculum at Bethel, all that means is that the B.A. in social work has a language requirement that the B.S.W. does not have. That is the only essential difference.

In conversations with several community colleges in Kansas,[8] there is a strong interest in establishing degree completion agreements with Bethel College in the area of social work. The agreement process that is farthest along is one with Hutchinson Community College in Hutchinson, Kansas. The point to which that tentative agreement is heading to is one which incorporates a part of Bethel's program degree requirement into the Hutchinson Community College curriculum. In order to fit in all the degree requirements (both major and related field requirements) one course in the social work sequence, "Introduction to Social Work and Social Welfare Institutions," has to be taken in the sophomore year. Hutchinson Community College has agreed to offer that course on their campus in the Department of Sociology, taught by a qualified social work instructor. They will also try to advise students interested in social work to take the prescribed supporting and related courses offered at Hutchinson Community College that will fit the Bethel College degree program.

Bethel College has agreed to try to develop what is essentially the junior year of its social work degree program on the Hutchinson Community College Campus.[9] This means that instruction will have to be made available beyond what Bethel is currently able to provide in its residential campus program. It also means that in order to keep the adjunct to full-time faculty ratio at and acceptable level, two of the courses in the major will be taught by full-time or tenured faculty, one by adjunct faculty, with one or two electives being taught by either/or full-time and adjunct faculty.

This also means that, based on current faculty to student ratios and faculty to course ratios, Bethel will have to have three full-time social work faculty. They currently employ two-and-a-half time faculty persons. The hiring of a new faculty person will require an enrollment of at least 10 students in the "2+1+1" program.

The last year of the program will technically be by enrollment on the Bethel College Campus, although a major portion of it will actually be in "Social Work Field Instruction" (10 hours), which is actually off campus. Only 20-22 hrs. of instruction will actually take place on the Bethel Campus in the senior year.

Conclusion

This briefly describes the way in which a community college and a small liberal arts college in Kansas are apparently bridging the gap between the needs and the opportunities to provide a social work degree program and the demands of a professional accrediting body to limit the way in which such a program can be delivered. The point is not to give up and assume that there is no way to meet all the mandates. If you cannot have a 2+2 degree arrangement, you may still be able to have a 2+1+1.

Endnotes

1. This was verified in a conversation between this author and the Director of Adult Education programs at Hutchinson Community College, Hutchinson, Kansas, August, 1991.

2. Adults in Kansas have become interested in going to college for a number of reasons: better job placements, advancement, job enhancement, promotions, life satisfaction, job and career changes, career development, professional certification, etc.

3. The largest community college in the state has over 12,000 students enrolled. The largest private, four year college has no more than 1,500 students enrolled.

4. There are other schools from out of state which operate programs in Kansas with Kansas State Department of Education approval. These are professional degree completion programs and programs in conjunction with the Department of Defense on military sites.

5. Lately, they have been a real feeder source of athletes for colleges and universities all over the country.

6. Handbook of Accreditation Standards and Procedures. Commission on Accreditation, Council on Social Work Education, Revised 1988, Washington D.C.

7. Another problem in Kansas is the fact that many of the teachers at the college level, both in public as well as private institutions, are reluctant to give up their valued places teaching at "regular hours" in "traditional programs."

8. Specifically, the colleges with which discussions have taken place are: Barton County Community College, Great Bend, Kansas; Hutchinson Community College, Hutchinson, Kansas; and Butler County Community

College, El Dorado, Kansas. Some articulations already occur with Hesston College, a private, liberal arts, junior college.

9. Courses included in the social work major taught in the Junior year are: "Human Behavior in the Social Environment," "Research Methods in the Behavioral Sciences," "Helping Skills for Human Service Work," "Field Experience," "Theory and Practice of Social Work I," and "Social Welfare Policy Analysis." These courses total 18 hours. An additional 12-14 hours of upper division electives and related requirements will also have to be provided; literally, 30-32 total hours of course work to be provided on the Hutchinson College campus.

CONNECTIONS: A UNIVERSITY/CORPORATE PARTNERSHIP - THE DREAM, THE REALITY

Anna M. Mancino
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Introduction

An innovative university/corporate partnership was created by Pacific Telesis of California and the University of Redlands. The corporation's "dream" was to provide a curriculum which would allow individuals with no college credit who were employed on a full-time basis to complete a baccalaureate degree in approximately four academic years. The Whitehead faculty developed the Connections Baccalaureate Degree model, a thematic, interdisciplinary, multicultural, concept-building curriculum.

The Academic and Career Decision Making Seminar (ACDMS) was developed in response to the corporation's request for a model equivalent to the "gateway" concept previously utilized by the corporation. Special features of the seminar include: the critical thinking core; the life/career/educational plan; collaborative learning/peer tutoring; the Family and Significant Other (FOSO) Evening; and the Learning Portfolio.

Implementation of ACDMS necessitated that stakeholders -- the University, students and the Corporation -- modify their dream. While data gathered supports faculty expectations about students' academic achievement in mathematics and English skills, other expectations have had to be modified. The complex nature of the demands and expectations of the participants in the Connections program have made implementation of the program more difficult than anticipated. Despite modifications to the original concept the results have left participants with a reality that is every bit as exciting as the dream.

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The Dream, The Reality

An innovative university/corporate partnership was created by Pacific Telesis of California and the University of Redlands. A meeting was convened in November of 1989 by representatives of the corporation and the University. Representatives of the corporation presented their "dream" to the faculty of the Alfred North Whitehead Center (ANWC) at the University of Redlands. The corporation's dream was to provide a curriculum which would allow individuals with no college credit and who were employed on a full-time basis to complete a baccalaureate degree in approximately four academic years. At the conclusion of the meeting it was agreed that the Whitehead faculty would attempt to develop a model curriculum by the deadline date of February 1991.

A Special Subcommittee to the Whitehead Center Curriculum Committee was established and thereby, a group of "project champions" became associated with the endeavor. The committee developed the Connections Baccalaureate Degree model, a thematic, interdisciplinary, multicultural, concept-building curriculum. This curriculum encourages students to reflect on the self and then explore increasingly wider issues: the self in the family; the self in the organization; the self in the local and national community; and the self and the world.

The Connections curriculum consists of three phases: Phase I - the Academic and Career Decision Making Seminar; Phase II - the Connections lower division, two-year curriculum, and Phase III: the current upper division curriculum. After satisfactory completion of a preparatory, fourteen-week, college level course, employees of the corporation embark upon a baccalaureate degree program. Classes meet for three, fifteen-week trimesters per year.

The "project champions" developed the curriculum to meet the needs of the corporation within the specified time frame. In order to keep the design process on track, the team communicated, as necessary, various aspects of the design to appropriate stakeholders.

Partnership Courses are a unique feature of the curriculum, they consist of three elements or modules: a) the academic modules are theory based and taught by the University; b) the application modules provide practical and technical application opportunities and are administered through the organization's developmental activities; and, c) the evaluation modules are conducted by the University faculty who provide evaluation and assessment of outcomes.

The Academic and Career Decision Making Seminar

The Academic and Career Decision Making Seminar (ACDMS) was developed in response to the corporation's request for a model equivalent to the "gateway" concept previously utilized by the corporation. The "gateway" model which was developed for Pacific Telesis by other academic institutions consisted of a series of mathematics and writing courses over a period of nine months. Students attended class four evenings per week while employed full-time; this became known as the "killer college."

The Academic and Career Decision Making Seminar, a fourteen week pass/fail seminar, was developed to provide the skills necessary for success in a college environment. The Academic and Career Decision Making Seminar was designed to focus on personal, academic and career development; critical thinking; mathematical, written and oral communication skills, in combination with the exploration of current business issues. The objectives of the Academic and Career Decision Making Seminar were as follows:

1. to improve verbal and written communication skills;
2. to develop critical thinking capability;
3. to develop approaches to problem, situational, and case analysis;
4. to refresh mathematical skills and apply these kills to business situations;
5. to create a career/life/educational plan;
6. to build student survival skills and study habits;
7. to develop the students' sense of self;
8. to develop multicultural awareness;
9. to perform an aptitude and abilities self inventory and relate those aptitudes and abilities to requirements of positions in establishing a career ladder; and
10. to develop the ability to analyze critically the work of others.

Special features of the seminar include the critical thinking core; the life/career/educational plan; collaborative learning/peer tutoring; the Family and Significant Other (FOSO) Evening; and the Learning Portfolio.

The critical thinking core became the framework upon which the mathematics and the humanities components of the Academic and Career Decision Making Seminar were built. The unusual integration of quantitative studies with the humanities can be illustrated by the following example:

a. logical argumentation was introduced as an element of critical thinking;

b. the mathematical segment dealt with inductive and deductive reasoning as expressed in the development and application of the law of mathematics; and

c. at the same time, the humanities segment utilized logic in the development of theses for essays.

In this way, critical thinking connected seemingly unrelated course topics. This introduction to an integrated, interdisciplinary approach was uncomfortable for students. The framers of the seminar recognized this discomfort, however, and concluded that it was necessary to include the approach in the freshman experience in order to broaden students' perspectives thereby enabling them to survive an innovative, highly integrated, interdisciplinary, baccalaureate degree program.

The life/career/educational plan provided students with an opportunity to determine their short and long term goals and analyze these goals in light of outcomes of assessment instruments such as the Academic Profile, the math and English diagnostic examinations, the Life Planning Program Worksheet, the Work Values Worksheet, the Learning Styles Inventory, Holland's Self-Directed Search, and the Keirsey Temperament Sorter. Students compiled and analyzed the above data and subsequently referred to the Dictionary of Occupational Titles (D.O.T.) and the Occupational Outlook Handbook as a prelude to the development of their written life/career/educational plan.

A supportive environment has been shown to be essential in mitigating the effects of student anxiety resulting in higher than normal student attrition rates. An important element of the Academic and Career Decision Making Seminar from its inception was the concept of collaborative learning. The program initiated two major types of collaborative learning; the student learning team and supervised peer tutoring. The learning teams required stronger students to work with students with greater needs in case the latter had to represent the team. Because student participation was an aspect of the overall grading criteria, care was taken to insure that stronger students did not dominate small groups and other activities. This process encouraged students who were naturally more reticent to participate more fully in class activities.

The use of supervised peer tutors added a second element of collaborative learning. Students with strong skills were able to augment the faculty during laboratory times in working with students who had a difficult time grasping concepts and therefore, needed more repetition or practice to gain required competencies. The peer tutoring concept created a network of colleagues who were accessible during work hours. Peer tutoring provided the opportunity for students to achieve greater facility of the academic material and at the same time provided a catalyst for greater group cohesiveness. Peer tutoring continued to build a non-threatening classroom environment and, therefore, had a positive impact on reducing attrition.

An additional element which contributed to the supportive environment of the seminar was the Family and Significant Other (FOSO) Evening. Following a time management lecture, students, family members, and significant others engaged in a life management activity. Participants negotiated with one another to develop contracts which would address the inevitable conflicts that would be encountered in the student's quest to complete his/her baccalaureate degree and processed resolutions, beforehand, to these potential conflicts. It was the intention of the faculty to strengthen students' support systems through activities such as the FOSO Evening and, thereby, reduce attrition.

The Learning Portfolio provided an opportunity for students to devote time to reflect upon knowledge gained throughout the program. The Learning Portfolio represents a compilation of the assignments and documentation of academic progress during the seminar. In addition, the Learning Portfolio will include major/significant assignments, projects, and papers from various Connections courses; the Multicultural Research Project; and the final colloquium paper. The Learning Portfolio will continue throughout the four year program as an integral part of the field studies sophomore and senior colloquia. The objective is to compile a recorded series of learning events over the complete program upon which students reflect in the colloquia. The Learning Portfolio as envisioned in the Academic and Career Decision Making Seminar invites students to bring together in one portfolio various elements of their learning experience in order to reflect on how seemingly unrelated elements draw together through the process of critical thinking to establish a cohesive body of knowledge.

Development of the Connections program, in conceptual format, was completed in short order. Working seven days a week, three faculty members and the Dean of ANWC were in a position to present a model of the four-year program to Telesis Management Institute (TMI) and the full ANWC faculty within three months. Movement of the program from the intrapreneurial to the implementation stage necessitated shifting gears from conceptual to practical problem solving.

Faculty concerns of all types had to be addressed prior to moving forward. Input from colleagues had the effect of strengthening the concept and could be incorporated into it with little difficulty. Since one of the steering committee is also chair of the ANWC Curriculum Committee, passage of the concept through faculty governance was also facilitated. Development of course syllabuses could then be addressed upon receipt of the faculty assembly's seal of approval. Development of the syllabuses involved utilization of University-wide resources, but even allowing for the some 400 full- and part-time faculty pool, finding faculty to teach the classes became a monumental task when eight times the numbers of expected students and clusters signed up for the program. The trend has been continued into the next registration cycle, and is being met by a campaign of faculty recruitment and borrowing from the pool of faculty from existing programs. We anticipate that the measures we have undertaken will resolve the faculty shortfall within a few months. One unexpected advantage of the greater than anticipated faculty demand is that many ANWC faculty who might not otherwise be involved in the Connections program, have volunteered their services. Many now have a stake in the success of the program and are committed to supporting it.

The initial process of satisfying faculty governance was rendered more problematic by virtue of the fact that ANWC is the adult education arm of a small liberal arts college dominated by the faculty of the traditionally-aged students. For many of our colleagues, the realities of educating adults in an accelerated format and in widely dispersed off-campus sites are inimical to cherished beliefs. While recent research has indicated that high school G.P.A.'s are a poor predictor of success for returning adult students, ANWC faculty recognized that establishment of any other entry criteria than those in force for residential eighteen-year-olds, would probably scuttle the whole program. As applications began to pour in from the corporation, it became clear that with fewer than 10% satisfying the imposed G.P.A. criteria, the program would be doomed. On the basis of the research findings, ANWC faculty sought and gained approval for permission to conduct its own research. It was our hope to demonstrate that motivation, and not high school G.P.A.'s would be the criterion for success.

Underlying the development of pre-semester (ACDMS) was the primary concept that the skills and knowledge involved in the course would be a review for the students. To test the concept we established three hypotheses.

H1. Students entering the Connections program will be of the same population in terms of performance abilities on the mathematics and the English pre-test instrument.

H2. Students will exhibit significant learning gain as measured by improved performance on the post-test as compared with the pre-test.

H3. The material in the course is all review and there should be no significant difference in student performance on the final as compared with their performance on the mid-term examination.

To examine the hypotheses, we instituted a pre/post test instrument in both mathematics and English. These instruments were administered at the beginning of the semester and again at the end. We also administered a midterm and a comprehensive final examination in mathematics.

At the time of writing this paper, there were only a limited amount of data available for analysis, but preliminary findings based upon statistical analysis, have lent support to our hypotheses. Our first hypothesis, that our students come from the same population in terms of mathematical and English skills appears to be supported since the data allow us to reject the hypothesis of a significant difference among groups.

Our second hypothesis, that students would exhibit significant learning gain as measured by the administration of a pre/post test instrument, is also supported by data rejecting the null hypothesis. While not a formal hypothesis, the data analysis of a pre-test/mid-term examination and pre-test/final examination also support the acceptance of our hypothesis.

The third hypothesis, that the course was a review of previously learned material was apparently supported by the data analysis, but direct questioning of the students does not lend support to the notion. We shall have to examine the issue at a later stage when the data for all the groups become available. At that time, we shall also perform a transcript evaluation of the students' academic records in order to support either the null hypothesis or our hypothesis.

The preliminary study and the data yielded by it, have raised many interesting questions that warrant further research. Overall evaluation of the data and of the course itself, however, have permitted us to make several structural changes to the ACDMS and to the freshman year. We feel that the changes implemented will strengthen the course and are a direct response to the realities of the situation.

While faculty were able to make predictions, on the basis of experience, about the motivation of individual, mature, returning students at the junior and senior level who already had substantial numbers of college credits, they were not able to predict with any great certainty what the realities would be concerning returning, mature students in a corporate setting, and who had no academic experience. Certainly, the dynamics of the complex interactions among the corporation, the students and the University have altered original expectations.

The student body and the corporation itself, like the University, are complex entities having their own individual, and sometimes mutually exclusive realities. While corporate cultures are in many ways valuable, they can sometimes engender not-so-positive phenomena that have created challenges for students and University alike. One example of this may be found in the attempt to implement the Partnership Course idea. Partnership courses combine a University-taught, theoretical element with an in-house practical element; the whole course is concluded with measurement of outcomes by the University.

At the outset, Telesis Management Institute (TMI), the educational arm of Pac Tel, suggested that students would be able to complete the in-house element of the Partnership Course on a day-release basis. Lower level management and craft unions opposed the concept with the rationale that there was an issue of equity for non students. The internal decision to veto day release has had an important impact upon the delivery of the whole program. Students are unwilling to lengthen the program, and the University is unable to compromise graduation requirements or to permit simultaneous enrollment in more than one accelerated class.

The solution to the problem has been an interesting combination of pragmatism based, in part, upon a modification of initial faculty perceptions of students' capabilities subsequent to the ACDMS experience. In addition, the University and TMI experienced some difficulty in matching the proposed in-house element with the theoretical element. The University's decision to replace the in-house portion with an English composition course will give TMI additional time to meet internal administrative and educational requirements, and will give students a much needed opportunity to refine writing skills. A Partnership Course in a subsequent semester will probably now be replaced with an additional mathematics course in order to give students much need assistance in mathematical reasoning.

Underlying ACDMS is a core of critical thinking. In view of lower than anticipated G.P.A.'s and the experience with the initial model, faculty concluded that students need considerable practice in developing critical thinking skills, logic, reasoning, and written and oral communication skills, despite the significant improvement in test scores from the beginning to the end of the pre-semester. Much material from the original ACDMS was regretfully omitted in favor of a more integrative approach focussing on essentials that would permit the returning adult to thrive in a college environment. Thus, in an opening series of classes, the underlying concept might find expression in deductive reasoning in the mathematics portion of the class, while in the humanities section, students would be asked to discuss how an authoress presents her argument, and whether or not is valid. At another stage, students might be working on word problems in mathematics, and analyzing a Sherlock Holmes story for an English assignment. While faculty still do not consider the pre-semester as remedial, the "reality version" of both the pre-semester and the first year concentrate far more than the original version upon providing a good solid base for the continuing college experience.

In order to build upon the foundation laid down in ACDMS, the program is constructed in a building block approach, where each rests upon a preceding one. Critical thinking is carried from ACDMS into the freshman year; courses within the freshman year are the foundation for other courses. The first course in semester one is such an example. "Search for Self" is a philosophy course designed to help students gain a better understanding of values through an examination of "big" theories of human nature. It also builds upon insights into cultural diversity and the values gained in ACDMS. For students unused to examining theories such as Plato, Confucius, Christianity, Marx, Freud, Skinner and Sartre, philosophy can be a daunting proposition. Accordingly, faculty have designed a field studies course that asks them to perform community service. Thereby, students can reach the realization that philosophy is not merely an abstract construct, but has practical applications. A student working with the Salvation Army may understand that the philosophical premises underlying the aid given could radically alter the nature of the service. By placing the Field Studies course alongside and overlapping the "Search for Self". students gain valuable extra dimensions--time for reflections and a practical application--to their theoretical studies.

One of the biggest hurdles to overcome is the corporate mindset. Students themselves have commented upon it, and it may be a feature of corporate culture, or, as faculty suspect, a result of training rather than education. Whatever the causes, the manifestations have had diverse impacts upon program delivery. While senior management is committed to providing quality education that is 100% reimbursed to any employee who qualifies, there is suspicion about corporate motives in lower echelons. The company is prepared to spend millions of dollars per year in tuition, but budget managers at first and second levels can, and do, block expenditure on such seemingly trivial items as air conditioning based upon costs. It is our belief that as non-degreed lower management see the enthusiasm generated in their subordinates as well as the improvement in their on the job performance, their skepticism will diminish. We already have evidence that some of these managers have signed up for the program, or are at the very least encouraging their subordinates who have done so.

In the students, the corporate mindset shows up as the view that there is only one way to do something. In some areas suspicions run deep, in others they are comparatively easy to dispel. In ACDMS, a critical thinking exercise based upon work experience had to be abandoned in the face of deep-seated anxieties about job security in an environment of corporate down-sizing. On the other hand, when the subject of diversity was not job-related, as in the multi-cultural arena, students were genuinely excited about their assignments.

Despite all of the adjustments that reality has necessitated those participating the Pacific Bell/University of Redlands Connections program make, the vision has remained essentially the same. For the Corporation, the benefits are enormous: an educated, not merely trained workforce, can provide the extra edge that senior management seeks in a highly competitive environment. For the students, reality means long hours of study and more commitment than they probably ever dreamed of; but it also means more personal fulfillment and possibly greater job satisfaction and security. The faculty are faced with a group of students whom they must work hard to convince that despite past lack of success in the academic arena, can perform every bit as well in a college environment as their contemporaries who made the grade in high school. It is also possibly a student body that is less well prepared, and more vulnerable than faculty had expected. This particular academic program is arguably more challenging than expected for all concerned, but the reality of its implementation is every bit as exciting as the dream.

ESTABLISHING A MICROCULTURE FOR CHANGE WITHIN AN INTERDISCIPLINARY, MULTIGRADE PROGRAM

Betty Jo McCarty
Linda D. Alkove

Introduction

A new vision of education is becoming a reality in Bay County, Florida as a part of a Florida State University-Bay County School District collaborative effort--the Enhancement of Mathematics and Science Teaching Project (EMST). As the FSU component of this project, our purpose is to proactively develop a microculture for change within an interdisciplinary/ multigrade teaching environment. To accomplish this, we sought to enable teachers to see themselves as change-agents and collaborators in improving student understanding across grades K-12. We also visualized ourselves guiding the EMST teachers toward recognition of their personal power to initiate curricular improvements in their own classes and in their schools.

Setting the Stage

Traditionally, schools have tried to improve teaching by imposing curricular changes and techniques on the teachers. This model for change called a deficit orientation model, theorizes that problems with educators are caused by inadequate teacher behavior (skills and preparation) and inadequate information. The assumption here is that teacher behavior can be more effective if knowledge on adequate skills, preparation, and information is imparted to the teachers. It also assumes that teachers do not have the ability or the inclination to effect those changes on their own. Ironically, these reforms ignore and even contradict research on organizational effectiveness, which means they have a high potential for failure because they fail to reflect a design that takes into account the attitudes, values, beliefs, and emotions that individual persons bring to the classroom. Because of this potential for failure, we in the EMST research team strongly believed that educational improvements could only come about if teachers could learn to empower themselves, accept responsibility, and become the primary change agents of school restructuring here in Bay County.

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The Players, The Philosophy

Bay County's primary change agents come from a variety of schools and teach at a variety of levels. They include:

Brian, a high school mathematics teacher in his first full year of teaching.

Steve, a high school science teacher who has taught for twenty-one years. Last year, Steve won an award for outstanding teaching in this district.

Sally, a sixth-grade reading, mathematics and science teacher in her fourth year of teaching.

Donna, a seventh grade mathematics teacher who has taught for six years at the middle school level (and several more years elsewhere).

Wanda, a kindergarten teacher who has taught in Bay County for five years after several in the Department of Defense school system.

Barbara, a fourth grade teacher with sixteen years of teaching experience.

Our research team also represents a broad curricular base. The members are:

Dr. B. Jo McCarty (EdD, Elementary Education)
Dr. Kenneth Shaw (PhD, Mathematics Education)
Dr. Nancy Davis (PhD, Science Education)
Ms. Amal Sidani-Tabbaa (graduate student, research associate, and former secondary science teacher)

Although we brought a number of perspectives to the research effort, one thread bound us all: the constructivist paradigm.

The constructivist epistemology reflects a strong belief that learning comes from personal experience and involvement in hands-on activities, problem solving, investigating, cooperative learning, etc. Constructivist classrooms are envisioned as student-centered, with the teacher acting as guide and facilitator. This image contrasts sharply with the behaviorist metaphors which represent teachers as transmitters of knowledge and students as passive receivers. Additionally, the behaviorist view sees teachers as passive receivers when it comes to reacting to direction from authority. Our first and most formidable task, therefore, was creating an environment conducive to changing the EMST participants' perspective from behavioral (conduit-receiver, with change imposed from above) to constructivist (guide-facilitator, with change generating from within the self). To accomplish this we needed to establish an atmosphere of trust and supportiveness while simultaneously making it clear that WE did not own or control the project. Our approach was based on a set of assumptions, foremost of which were (and still are):

1. Change cannot be legislated or demanded. It is a conscious choice made by an individual.

2. People can constructively reconsider their values and beliefs (their philosophies). This process can be facilitated, without controlling direction, by providing a framework or structure where introspection and change are valued.

3. Teachers can grow in personal strength and handle freedom in a rational manner. The exercise of personal strength and freedom by teachers will improve the learning process for students.

Cultivating Change from the Self

We were particularly anxious to communicate the idea that change cannot be legislated, and that it must come from the teachers' themselves. During the first two meetings the EMST teachers were not willing to accept this kind of responsibility. They believed we were there to direct and control the research project and to provide their materials, resources, and instructional techniques. Donna and Barbara voiced the opinions of the teachers: "At the beginning of the project we [the teachers] felt the research team was here to tell us what to do, how to do it, and provide resources for us to improve our classes." Because of their prior experience with change imposed from the top, they place the research team in an authority position. We were "experts," who were supposed to provide directions and transmit instructions. They saw themselves as "guinea pigs for research." Brian commented, "When we [the teachers] started out we had no idea. We kept asking 'what do you want' because that's what we were used to doing."

Regardless of these expectations, however, we subtly encouraged the teachers to assume ownership of their own knowledge and ideas. Our goal was to provide support without directing the project too much, and move to the point where we did not direct the project at all. We focussed on creating an environment conducive to change. As such, we used a non-directive, person-centered counseling model grounded in personal construct theory developed by the noted psychologist Carl Rogers. This model emphasizes a "self-as-instrument" concept of teaching and research (Combs, 1978). We viewed staff development as a process in personal becoming, with the teacher being a unique human being possessing personal beliefs and values which govern his or her practice.

Rogers (1961) summarized the basic premise of this theory in one sentence: "If I can provide a certain type of relationship, the other person will discover within himself the capacity to use that relationship for growth and change and personal development will occur" (Rogers, 1967 p.33). He further hypothesized that "significant positive personality change does not occur except within a relationship."

One Step at a Time--The Change Relationship Develops

This special relationship for change within the EMST group did not occur until the third meeting. The teacher participants had not ever worked together before. Since most were from different schools, they had little intimate or personal knowledge of one another. They were too busy getting acquainted with us and with the new situation. At the third meeting, however, an event occurred which brought the individual teachers together and resulting in universal acceptance of the EMST group as a teaching family. This event was triggered when a research team member asked the teachers to create a vision of how their classrooms ought to be versus how they were. After two hours of negotiation, they identified a set of "snapshots" within which each teacher could view his or her own classroom instruction and their students' learning. These snapshots included problem-solving, cooperative learning, mathematics and science relevance, and student autonomy. All of these characteristics represented a mission to work toward; an ideal to maintain. They were the foundation of the EMST teachers' new vision, and their commitment to new metaphors for teaching and learning. One of these new metaphors included membership in a family group striving to improve teaching and learning for themselves, their students, and their schools.

Finding Personal Philosophy Through Reflection

The problem that remained, however, was putting these new images into practice. This required developing, or identifying, personal teaching philosophies, deciding to change, and then changing. The most difficult and time consuming of these tasks was the search for personal philosophies. It was during this phase that our support was most needed by the EMST teachers. In growing up, all of them experienced only the traditional essentialist philosophy and behaviorist psychology in the home and school. Being part of the EMST project had thus far raised their awareness of the existence of alternative philosophical camps. They also had to deal with the disturbance, or perturbation, they experienced when they realized their classroom practice did not reflect their beliefs. As Barbara put it:

> The project has made us look back at things, where before you did it and you may be disturbed by it but you never spent any time thinking about why it disturbs you. Now I reflect two or three times a day and even in the middle of lessons and you are aware of it so that you can make changes if you need to even quicker than sitting down at the end of the week or even at the end of the day.

Discovering the Model for Change

We, as the research team, assumed roles designed to encourage reflection. As the teachers perceived us, we were prodders, moderators, mentors, friends, advisors, counselors, perturbers, and questioners. The teaching families themselves gradually assumed these roles, maintaining a tradition of continual reflection and interaction. As we monitored their progress (through personal observation, videotaping, interviews and audiotaping), examined their reflections and listened to the family members interact, we developed something we did not have to start with -- a model for teacher change. This model describes the cognitive requisites for change, with reflection permeating every level. These requisites include: perturbation (or disturbance), awareness of a need to change, commitment, vision, projection of self into vision, and cognitive/overt changes.

The Struggle with Fixing It

We also discovered that change is an ongoing process, with teachers struggling to attain one vision, one metaphor, one goal at a time. Although these struggles were highly personal, the members of the teaching family provided mutual support. To do this, they adopted a policy of honesty, openness, and acceptance whenever they met. Steve describes it this way:

> It is just that everyone can be themselves. There is no need to put up a facade. It is almost like that we are all in this together and we are all trying to change and if we are trying to change then that means that none of us are perfect or feel that we are perfect. Therefore, we can just get it all out in the open and let's see what we can do. If something is wrong, then let's fix it.

Through reflection and group interaction, each member of the teaching family identified which of his/her own classroom practices to change, and made the conscious decision to change it. Within the new cultural construct of the teaching family, new ideas became plans, which in turn became classroom experiences, which teachers shared, discussed, critiqued, changed and tried again. The heady intellectual climate in this microculture, however, did not totally allay the fears and apprehensions of the EMST teachers when they confronted the reality of implementing change in their classrooms. Since they were adopting methods and practices they only had abstract images for, their fears grow out of their earlier conditioning. They expressed common anxiety about "losing control of the students." One teacher in particular, Brian, found that while he was comfortable engaging his vision of cooperative learning in his other classes, he felt compelled to maintain an authoritarian attitude with his lowest level math classes. He told us he was "worried about a situation that may get out of hand in class."

Control is not the only barrier to action. Another teacher, Steve, also identifies comfort with the old ways as another:

> . . . it's the comfort, the security blanket. You cling to the past, you hate to let go . . . Maybe my conflict with content versus student interest is that maybe I don't know how to teach it any other way . . .

One element in that comfort zone is silence. Within the traditional model of education, silent classrooms full of quiet children provide the best learning environment. A constructivist classroom, on the other hand, employs interaction and as a tool for exploration, discovery, and understanding. Some EMST teachers who attempt cooperative learning have difficulty resolving their dilemma of "silence=learning" with the practice of encouraging dialogue between students. Donna, our middle school teacher, recalls: "There's more freedom, openness and cooperation in the way I now teach. There's also a lot more noise."

The Continuing Journey Toward Resolution and Change

The EMST teachers are involved in a continual process of resolving the old and the new. Because resolution is not so easy in isolation, the teaching family has become the focal point for working out personal dilemmas, and for gaining empathy with other students and teachers. This empathy provides another avenue for change. As Donna summarizes:

> One can get new ideas from them [the EMST family] . . . I enjoy the others' viewpoints being expressed. It makes me feel that what I'm doing is connected with what they're doing. I understand my students better because I hear where they've been. I can prepare better because I hear about where they're going. It makes me thankful about where I am.

The original teaching family has provided us with knowledge and the impetus to expand. Their efforts have directly impacted student learning in their own classrooms, and they have increased local teacher interest in the program. These teachers, in turn, have become members of new teaching families and are going through the same growth processes experienced by the original EMST teachers. Although not all comfort dilemmas have been put to bed, EMST teachers are enhancing the definition and scope of student-centered learning throughout Bay County. The most positive outcomes have been in student attitude and behavior. EMST teacher report an increase in student self-awareness and concern for one another -- a direct outgrowth of their cooperative learning vision. Students suffer less from discontinuity because EMST teachers coordinate interdisciplinary curriculum across the grades. For example, our high school mathematics teacher (Brian) changed the order of his curriculum when he discovered that certain mathematics concepts would support Steve's science class. This discovery was the direct result of the exchange of ideas and information, which by the third year of the program was occurring both within and outside of formal family. These meetings are now controlled by the teachers themselves, with the researchers only providing support and information as requested. The teaching family has become their own microculture for change, empowering EMST participants to make their own decisions, take their own responsibilities, and implement their own courses of action.

We do not expect each microculture to evolve at the same rate in every teaching family. Eventually, however, we foresee all teaching families becoming as dynamic and personally powerful for their members as the first. And, as we observe the proliferation of these families throughout Bay County, we expect to learn even more about how, why, and under what circumstances teachers will empower themselves to improve their teaching and learning communities.

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THE UNIVERSITY OF SOUTH CAROLINA - AIKEN
SUMMER INSTITUTE ON TECHNOLOGY TRANSFER (SITT)

Dennis Rogers
James Kauffman

Introduction

> The results of this experimental program between the University of South Carolina Aiken and the Westinghouse Savannah River Company proves with certainty, that technological collaboration between industry and collegiate business schools can be a mutually beneficial venture, both intellectually and economically. This appears to me as the ideal partnership.

(Comments from a speech by a
corporate executive regarding SITT)

Problem and Topic

One of the more critical dilemmas challenging the American economic stature is the loss of innovative initiatives. The market place is replete with illustrations of technologies developed initially in America, legitimately "captured" by a competitive nation, developed into a marketable product, manufactured abroad and finally sold in the United States.

Within recent years the magnitude of this problem has caught the attention of Congress and the Executive Branch, each responding with distinct actions to rectify this situation. Among the initiatives introduced are laws promoting the commercialization of technology from the federal laboratories by private industry and Presidential Executive Orders outlining guidelines to accomplish it. The latest in a series of these initiatives is the National Competitiveness Technology Transfer Act of 1989 which has given impetus to university partnerships.

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In most cases the corporate reception of these initiatives have been positive; however, due to the complexity of the process and lack of staff trained and knowledgeable in technological transfer procedures, the results have been positive but modest in scope. While generally agreed to be a worthy undertaking, a number of additional factors complicate the Federal laboratories response. These are related to their historical mission, the bureaucracies which oversee them, and the complicated nature of technology transfer itself. None, however, is more limiting than the deficiency in the fundamental knowledge required to "move" technology from the laboratories into the marketplace.

This project demonstrated how the knowledge gap could be reduced through a summer institute on technology transfer (SITT). It was designed with four specific purposes in mind:

1) to train students in technology transfer methods

2) to evaluate invention disclosures and examine their marketability potential

3) to develop an academic framework for technology transfer from which specific curricular formulations may be developed

4) to assess the economic and intellectual feasibility for establishing academic/corporate institutes for technology transfer

Unique Features of This Project

This project demonstrates an innovative educational approach of collaboration between a federal laboratory and a university which can be replicated. Although this specific project was with a Federal Laboratory, it has applicability for similar relationships between local industries and corporations having a R & D component and a college or university with a business school.

From this experience, it can be concluded that working agreements relating to technology transfer between colleges and universities and industries or local inventors is a feasible undertaking which is mutually beneficial.

A pilot summer institute in technology transfer (SITT) was specifically designed to expose and train undergraduate and graduate students in the actual processes of technology transfer and concomitantly create an academic curriculum for preparing students for a specialized career in the field of technology transfer.

Specific Features

1) This project was not a simulation but a "hands-on", academically designed experience in technology transfer which had legitimate academic and economic outcomes.

2) It was a cooperatively designed model involving the mutual efforts of a federal research laboratory and a higher educational institution.

3) It was interdisciplinary in nature. It utilized the special talents, diverse backgrounds and varied academic interests of selected students to examine specific technology transfer projects.

4) In their search for information, students and faculty had the opportunity to create professional contacts throughout the world.

5) It brought scientists/inventors into direct contact with the student and faculty participants.

6) The project was designed to meet an existing need by solving a major economic issue: transferring technology from federal laboratories to the private sector.

Results

The objectives of the project, the specific implementation activities and the preliminary comments on the results follow.

Objective One

To evaluate the technical and commercial feasibility of selected technologies.

Implementation

An initial screening of 133 corporately created invention disclosures was to be accomplished by the SITT participants (15 students). From this evaluation the students selected 57 inventions (approximately 43 %) as candidates for further examination. These selected disclosures were then prioritized into four groups representing those assumed to have the clearest potential for patentability, those perceived to have medium potential, those with projected low potential and finally those to have no possibility.From this evaluation the students selected inventions (approximately 43%) as candidates for further examination.

Following this student prioritization of the disclosures, to demonstrate how the process actually works within a corporate setting, an industrial patent committee deliberated over a different group of disclosures with the institute participants observing the process. The session concluded with a joint discussion between the corporation patent committee and the SITT participants reviewing the recommendations and priorities made earlier by the SITT students. The results of the decisions by the students were, with few exceptions, seen as having viability. The joint review resulted in a mutually agreed upon list of 59 selected disclosures. This list became the group which would be examined during the summer institute.

Outcome

From all perspectives the results of the project are noteworthy. From the 59 disclosures accepted for further study by SITT, 52 reports were produced. The research conducted by the students determined that 30 disclosures (inventions) had sufficient potential for further evaluation. As of early October, the corporate partner has acted on 16 of these as follows:

Prior-art search in progress	4
Search complete - item patentable	3
- item not patentable	2
Patent application in progress	6
Patent application filed	1

The 14 other disclosures are currently under corporate study.

Objective Two

> To provide training in the Technology Transfer process for participants in this pilot program.

Implementation

Students participating in the program were exposed to, and trained in, facets of the decision making requirements pertaining to technology transfer. This included an in depth orientation to the technology transfer process, a weekly scheduled training process throughout the duration of the project which included Friday morning seminar discussions with keynote speakers, specifically programmed field trips, scheduled personal encounters with scientific and technical experts, including interactions with specific inventors.

In addition, specific skill building exercises in such areas as telephone research techniques, location and use of resource materials, the identification and appropriate protocol with individuals having appropriate technical expertise were taught.

Outcome

From individually structured interviews at the end of the summer, all of the participants felt the summer had been "exciting", "challenging" and a worthwhile experience. Twelve of the 15 indicated it was a learning experience which will benefit them in their future careers. Seven indicated serious career reconsiderations to include technology transfer occupations. All felt "lost", "confused", "overwhelmed" in the early weeks; however, this changed to a feeling of confidence as they became familiar with the process. The encounters with the scientists (inventors) and the students was, with a couple of exceptions, a highlight activity. The field trips were a modest success. One of the very positive components was the weekly lecture program and subsequent Friday morning seminars with the speakers. Training in research protocol and information sources was rated low in the early weeks but received very positive comments in the exit interviews. Overall, the training program received positive comments.

Objective Three

To make appropriate parts of this training available to the community at large.

Implementation

A weekly public lecture series on related topics pertaining to technology transfer was held each Thursday evening. This was followed by a seminar the next morning with the SITT participants. These topics included:

How to evaluate the technical and commercial potential of new technology

The evolving legislative impetus for technology transfer in the federal arena

How to identify and obtain rights to technology developed in federal facilities

The protection of intellectual property and related legal issues

The financing sources for the development of new technology

Business planning for the development of new technology

Appropriate linkages with local economic development initiatives

Panel discussions by entrepreneurs who have started businesses based on technology

Presentation on creativity and its role in technology development

Outcome

The organizers were disappointed in the community attendance at these events (approximate attendance 50 to 80); however, the impact on the students and those attending was significant. All of the student participants felt this was an important part of the program, and comments from the public following each lecture were very positive. Approximately 30 community guests attended all lectures.

Each lecture was professionally video taped and will be used in future institutes and for academic courses.

Objective Four

> To design a program which meets the mutual needs of the university and the corporation.

Implementation

The university had major responsibility for general oversight and management of the project. Due to the legal implications in working with disclosures, specific operational parameters and corporate expectations were worked out in advance. The responsibility of the institution included the selection of student and faculty participants, appointment of the Program Administrator, and coordination of all academic and training activities. The Summer Institute was run for ten weeks beginning June 4, 1990 and ending August 10, 1990.

The SITT project was hosted on a college campus. Due to the proprietary nature of the subject, controlled working areas were arranged, legal disclosure statements signed and necessary correspondence and telephone control log systems established. Required supplies, phones, and computer equipment were made available through the terms of the corporate agreement. All participants were provided appropriate university identification for access to the library services. In most cases housing was provided for the participants.

Each participant was expected to be involved for a full working day during each scheduled day of the project, participate in all scheduled activities including the community lecture series, and be a contributing member of his/her task group. A signed statement of Performance Expectations was required of each participant.

The project focused the special talents and diverse backgrounds of the selected students on specific technology transfer projects.Each was currently enrolled and pursuing graduate or undergraduate degrees in a variety of academic disciplines including business, engineering, medicine, and pharmacy. The students were evenly divided into three "task-groups" each group led by a member of the SITT faculty. Each task-group selected the specific disclosures they wished to evaluate.

Faculty from three institutions provided the orientation and training for all participants and then managed a specific task-group during the summer. In addition, the task-groups were provided additional support through a "floating" faculty expert who had industrial experience in working with disclosures.

Another professional academician was employed and assigned responsibility for project research. Throughout the summer, documentations from group observations, inventor reaction surveys, weekly student evaluations, personal interviews, summaries of weekly staff meetings and indepth interviews at the end of the project have been accumulated for evaluative purposes. Findings obtained through this process serve as a basis for a summary document with recommendations for future programs.

Effectiveness and Specific Benefits

The effectiveness of this innovative approach rested with its design. Selected students, supported by faculty and administrative staff, evaluated the technical and commercial feasibility of unscreened disclosures (inventions) submitted by scientific personnel employed in a federal laboratory. Certain inventions, using established criteria, were selected for further work-ups including patentability exploration and when appropriate, a marketing plan was outlined.

The primary benefits of this project were:

1) the development of a cadre of trained students and faculty in the process of technology transfer.

2) the initial design of a program which may be used as an example for other similar projects.

3) the movement of specific technologies from the laboratories to private enterprise.

Level of Students

The project is specifically designed to "blend" undergraduate and graduate students having differing majors and areas of expertise.

Due to the characteristic of the host school which is primarily an undergraduate institution, and the corporate interest in expanding the opportunities for student involvement, students from five different institutions were selected. Members of the faculty came from three institutions.

Potential Use by Others

This project was designed in such a manner that the format is adaptable to other higher educational institutions. Colleges and Universities, in conjunction with one of 700 federal laboratories or any private industry which is interested in expanding its technology transfer capabilities, may find this project of interest.

THE PRESIDENTIAL INTERNSHIP PROGRAM: BRIDGING TWO WORLDS

Wallace V. Schmidt
Greg H. Gardner

During the past decade, student internships in a variety of disciplines have expanded and become a standard part of the traditional curriculum. For the most part, internship programs have received enthusiastic support. The Presidential Internship (PI) program offered at the Hamilton Holt School of Rollins College is unique in that it represents a nontraditional learning experience in a non-traditional program. This paper will (1) identify the distinct features comprising the PI program, (2) outline the details and responsibilities of the parties involved, and (3) describe the benefits and value-added advantages of such a program. The underlying premise is that the combined energies of the involved parties can create a partnership that provides extraordinary opportunities for learning and growth while creating a bridge between academia and the workplace.

In the past decade the development of student internship programs has received enthusiastic support in a variety of academic disciplines (Twiname-Dungan and Schnettler, 1985; Gross, 1981; Konsky, 1977; Gallagher, 1976; Renetzky and Schachter, 1976). This activity has resulted in student internships and practicum opportunities becoming a standard part of the college curriculum. Typically, the internship is a supervised assignment for a semester or a summer requiring a prescribed number of working hours for which academic credit is given. It is intended to provide students with valuable educational experience as they perform meaningful work assignments in host organizations. The overall success of these programs has even led some to suggest making them mandatory for everyone (Femmel, 1978).

The emphasis on career education and practical work experience through internships is a result of at least four major factors (Weitzel and Gaske, 1984; Moore, 1982; Spicer, 1979). First, disciplinary areas have changed, expanding their curricula to include new areas of study. Second, the tightening job market and the economic prospects for college graduates influenced the development of a curriculum that not only translates theory and research into practice, but that also increases the

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visibility of graduates in non-academic work environments. Third, increasingly greater numbers of students are seeking non-teaching degrees, and educators have felt the need to design new programs that will provide practical and educationally worthwhile experiences that will benefit them in the future. Fourth, there is a greater emphasis in education on integrating the liberal arts with the pragmatics of career development.

In keeping with these needs and trends, the Hamilton Holt School, an undergraduate, evening degree granting program of Rollins College, has instituted a Presidential Sponsored Internship (PI) program. The Presidential Sponsored Internship is a unique honors program which allows selected students to work on priority projects under the direction of a participating CEO or presidential sponsor. It provides exceptional opportunities for academically talented students to do applied study in an off-campus environment.

The Presidential Sponsored Internship (PI) Program

The Hamilton Holt School initiated the PI program on a pilot basis in the Spring of 1990. Currently there are twelve students representing five academic areas enrolled in this on-going, undergraduate, off-campus, experiential program. There are several distinct features which differentiate this program from more traditional student internship programs.

The PI Candidate

The Presidential Sponsored Internship is a privileged program designed for academically outstanding students. Students are selected through a formal application process by the program director working with the Dean and other faculty. Candidates must be matriculated students in the Hamilton Holt School having completed at least seven courses with a 3.25 grade point average. In addition, work experience, ability to work with others, likelihood for success in an applied environment, and clearly identified career goals and objectives are taken into account. To make the most of their field experience, students should already have acquired the following: (1) data gathering skills, (2) communication skills, (3) facility in role taking, (4) decision making skills, (5) skills for working in groups, and (6) exercising the praxis between reflection and action.

To be considered for the Presidential Sponsored Internship program, students must complete the "Presidential Sponsored Internship Application." If positive, a participating CEO or presidential sponsor will be contacted and an initial interview arranged. Also, a faculty sponsor will be appointed. When all parties concur, a "Presidential Sponsored Internship Agreement" and a "Faculty Sponsored Internship Agreement" will be signed. Participation in the PI program, then, is a privilege, not a right.

The CEO/Presidential Sponsor

Selecting an appropriate organizational sponsor and site supervisor is an important first step in creating a meaningful and successful internship program. As David Thornton Moore (1982) points out in dealing with the difference between academic and experiential learning situations, "The person is coming in contact with new kinds of knowledge -facts, skills, values, relations, procedures, principles - and the way that process occurs depends on the social organization of the overall situation." How enthusiastic and committed is the organization to the internship program? What kind of physical, cognitive, and affective skills does the organization demand from the student? Is the organizational sponsor willing to become an involved partner in the students' learning experience? The answer to these questions makes a difference in placing the student in a site that is going to best forge a link between the students' "psychosocial development and his or her ability to learn." (Witham and Stanton, 1979).

What differentiates the PI program from other internship programs is the use of CEO or presidential sponsors. Presidential sponsors are selected from the Hamilton Holt Board of Advisers and potential board members in the Central Florida metroplex. The list of presidential sponsors includes organizations involved in international assets, banking, telecommunications, publishing, broadcasting, hospital/health care, hotels/recreation/amusement, advertising, public relations, and marketing. Interested CEO and presidential sponsors are contacted and discuss with the program director such issues and policies as: (1) the kinds of work experiences and types of projects which will be acceptable or unacceptable, (2) the policy that the intern will not receive pay, (3) the length of the internship which is two terms, (4) the responsibilities and required involvement, and (5) the forms which will be completed during the internship.

Student projects are diverse and include a variety of creative experiences beyond the more routine assignments of traditional internship programs. Student related activities include: conducting market surveys, designing campaigns, planning and coordinating programs, running training workshops, assessing worker satisfaction and the communication climate in various work units, performing EEOC analysis, doing needs assessments, evaluating programs, developing manuals, designing brochures, preparing public relations messages, and writing articles. The primary criteria are quality and relationship to student objectives and the needs of participating presidential sponsors.

The PI program utilizes only CEO or presidential sponsors who have been carefully screened, are thoroughly briefed, and indicate a commitment to this partnership in learning. Projects are of a high priority nature, central to the needs of the sponsoring organization, providing students with considerable visibility and exposure. The broad range of sponsors and available internship activities permits us to uniquely meet the individual needs of the intern who is seeking to apply the knowledge gained in the classroom.

The Duties and Responsibilities of the Players

The academic success of the PI experience depends on the coordinated effort of all of the players in the internship - the intern, the organizational sponsor, the faculty sponsor, and the program director. "Relationship" is the key word as it implies a shared responsibility; at the same time, "relationship building" from the communication perspective involves open channels of communication and efforts to share expectations. For this relationship to be most effective, for the development of open channels and shared expectations, the "we-they" dichotomy usually implied in "work world" vs. "academic world" must be eliminated. Instrumental in eliminating this barrier is a clear understanding by the participants of their duties and responsibilities and the realization of the number of roles which both the organizational sponsor and faculty sponsor share. When both realize that they share the roles of mentor, evaluator, learner, and expert, the dichotomy between the two worlds can begin to dissolve and the possibility of shared responsibility for learning increases.

Role of the Intern

An initial step in ensuring a quality learning experience is exploring and defining the role of the intern within the organization. The organizational sponsor must be aware of the intern as someone other than a volunteer or a regular employee, although the internship may have characteristics of both. The critical difference is that the intern should be deliberate and self-conscious in the role of learner, and this role is a driving force in the experience. The experiences themselves are not the learnings, rather it is the reflection and assessment that the student makes on these activities that provide the basis for insights upon which the student can make future judgments. So, it is especially important that the intern understand that even though the internship provides practical work experience, this is an academic endeavor and academic credit for this experience is given at the end of the internship.

Also, during this defining period consideration must be given to how the intern can be used in the organization. Although the intern has a more short term perspective in the organization than a regular employee, he or she should be able to accomplish something valuable and tangible in the short time. Therefore, the organizational sponsor should develop a job description for the intern. This job description should define responsibilities and duties of the intern, outline projects with goals realistic to the shortened time frame of the internship, and identify specific skills necessary to the performance of these duties. This will help to guide the intern and faculty sponsor in developing learning goals, and will serve all parties throughout the internship in assessing the success of the intern.

Too often the intern is brought into the organization with little information and lacking a sound orientation. Not only does this lead to increased frustration for the intern, but it often means a slow start for the intern who already has a limited number of weeks in the organization. In order to resolve this dilemma and ensure a more directed performance the PI program requires that the intern contact the organizational sponsor and set up an interview to help conceptualize the exact nature of the internship. The specific purpose of this interview is: (1) to give the CEO or presidential sponsor an opportunity to meet the intern and determine if he/she is acceptable, and (2) to give the intern an opportunity to learn about the organization and potential project(s), and to determine if he/she wants to pursue this internship. At the interview the intern discusses his/her specific goals for the internship and what he/she hopes to learn. Following the interview, the program director contacts the organizational sponsor to get his/her impressions of the intern. Also, the intern is contacted to discover his/her impressions. If either party is displeased with the other, the program director: (1) tries to resolve the differences in an effort to salvage the internship, or (2) seeks to locate an alternative site. If both parties are pleased with each other, the details of the internship are further discussed, specific work assignments are agreed upon, and a "Presidential Sponsored Internship Agreement" is signed.

Role of the Organizational Sponsor

The organizational sponsor should be aware of his or her role as a mentor to the intern. Perceiving the organizational sponsor as a mentor means defining the supervisory role beyond that of one who is simply responsible for seeing that the intern does his or her job; it means thinking of the supervisory role as one of a guide, advisor, coach teacher, and role model for the protege. The mentor provides a supportive relationship for the protege by taking interest in the personal and professional development of the protege. Mentoring functions include:

* reminding self of the intern's learning objectives;
* challenging self to be aware of, and to assist the intern in moving through the developmental states of an internship;
* continually providing feedback to the intern, both positive and negative, which is descriptive and empowering to the intern;
* helping the intern to focus and reflect on observations;
* challenging the intern to develop new areas of expertise, and new confidences;
* opening areas of the organization to the intern through introductions, interviews, attendance at meetings, explanations about channels, politics, processes;
* promoting the intern within the organization and the profession.

Since CEO or presidential sponsors are particularly busy people, it is very important to clarify this role and establish a strong partnership and commitment to the PI program from the outset. Contacts between the organizational sponsor, faculty sponsor, and program director help establish the appropriate balance of involvement necessary to ensure this mentoring role.

Role of the Faculty Sponsor

Faculty sponsors serve as resource specialists to help the student to maximize the learning experience, to provide consistency, and to aid the student in the evaluation of the internship. Critical to this role is establishing learning outcomes in conjunction with the student. This requires identifying broad learning objectives which contribute to cognitive development, personal development, and moral and ethical development (Permaul, 1982). Clearly defined goals and outcomes serve to help the organizational sponsor place the student in a position where these goals can best be met. It is the benefit of all involved in the internship process to place the student in the best possible situation for learning to occur.

Writing goals also helps in the assessment procedure. The faculty sponsor is responsible for choosing an assessment strategy which provides the student maximum flexibility to demonstrate the knowledge and competency gained during the field experience. The critical thing to remember in order for measurement and evaluation to be valid and reliable is that some means of identifying the learning for which the student will be held accountable must be built into the program design. Usually a combination of strategies and evaluation tools are used in assessing and reporting results of the internship experience. These include a site visit, telephone contact with the organizational sponsor, individual conferences with the student, progress reports, occasional papers, and a journal or log submitted by the student reflecting personal observations and analysis of tasks and experiences. Assessment strategies serve to provide feedback to the student, serve as feedback for modifying the internship program itself, and serve as a basis for awarding credit or no credit.

The Program Director

The program director overseas the PI program, reviewing applications, surveying the needs of participating presidential sponsors, selecting faculty sponsors, arranging interviews, and serving as liaison between involved parties. The program director reviews student folders, assesses program effectiveness, and makes any necessary recommendations for change. Establishing and maintaining a supportive communication climate is key to this role. As with any relationship, the three-party relationship between intern, organizational sponsor, and faculty sponsor sometimes "works," and some times does not "work." When it does not work, it is usually due to unclear expectations and underdeveloped or underutilized channels of communication.

The inter-relationship among those involved is critical to the dynamics of the internship experience. These players form a system of interdependent parties which often goes unrealized and unappreciated even by the parties themselves. In order to create this interface and a networking of involved parties, the dean of the school, participating students, organizational sponsors, faculty sponsors, and the program director meet periodically over breakfast to discuss projects, approaches to organizational effectiveness, and other matters of common interest. Guest speakers are also invited to address such concerns as team building, job enrichment, and conflict management. These breakfast meetings assist in forging a vibrant partnership which helps ensure that the internship provides the richest learning experience that is possible.

The Benefits and Value-Added Advantages

Dewey (1910) anticipated what we now recognize as a benefit of the internship when he argued that learning is not static, and to learn one must be active and involved in the learning process. Learning is a dynamic process, constantly evolving as the learner is challenged by new experiences which may not fit into the pattern of thought and circumstances the student has previously known. Hutchings and Wutzdorff (1988) reiterate Dewey's reflections when they comment that, "Knowledge is made deeper when tested by experience. This knowledge in turn serves as a more focused lens for extracting meaning from new experience."

The Presidential Internship program benefits the intern, organizational sponsor, and faculty sponsor. Moreover, it provides other value-added advantages to the Hamilton Holt School.

Real World Classroom

The intern placement becomes a real world classroom where the student confronts new learning experiences and makes decisions based on knowledge and skills developed in more traditional scholarly settings. One intern put it this way:

> As an Organizational Communication student, I have learned how to implement internal communications functions. Through my internship, I was able to use the skills I learned in the classroom and apply them with hands on experience. Suddenly, I was being asked to give input in the decision making process concerning the company. I felt like a team member and I was. The people I work with are the best because they are very supportive of the suggestions or ideas that I wanted to introduce.

Another student observes:

> This project was my first exposure to the practical application of information that I have been studying in the pursuit of my degree in Organizational Behavior. During the internship I was also attending an Organization Development class . . . . The class and the internship provided me with an ideal learning situation. I was able to study team building theory and at the same time work with an experienced consultant on a team building session for a real "live" company. I was able to play a major role in all aspects of the project such as interviewing, problem diagnosis, technique selection, agenda setting, and moderating the actual team building session.

These students are definitely evidencing the process of formulating thoughts based on experience and reflection. The excerpts reflect accurate observation of events and activities, and suggest opportunities for both cognitive and personal growth indicating that they are using the skills learned in the classroom in their field experience. Additionally, we can speculate that they are building theories for future ways to pursue certain tasks based on what they have experienced and observed.

Networking and Career Development

The internship also permits students unique opportunities to network with colleagues in their chosen careers. The presidential sponsors can assist interns in their personal career development by forging professional links with significant others. These associations can prove valuable when interns later seek employment.

Priority Projects Can Be Initiated

CEO and presidential sponsors can assign and initiate priority projects which might otherwise be postponed because of more immediate concerns. These projects may even be brought to closure within the time-frame of the internship. This internship benefit is expressed by a presidential sponsor who notes:

> The project we agreed to tackle was that of an Internal Sales and New Employee Manual. It had been over two years since the manual had been updated (and, we never really had a professional organizational person take a look at the literature we had prepared). The first step in the project was for the intern to analyze what we had. She showed us, in outline form, the areas that needed to be "beefed up," as well as areas that needed to be updated.
>
> Working directly with her and several of my department managers we were able to completely revamp our manual. It is now a much more efficient tool, both as a training device, as well as a reference tool. It is utilized on a daily basis by people within our organization. We would not have been able to do this job as quickly

> (or as thoroughly) without her help. She made this one essential task (that we have been procrastinating on for over a year) come together . . . .

This observation is indicative of those received and further reveals the nature of the relationship established between the intern and the organizational sponsor. It also evidences the quality of learning experiences occurring during the internship.

Espoused Theory and Theory-Into-Practice

The internship provides faculty sponsors with opportunities to get off-campus and actively observe the interface of "espoused theory" and "theory-in-practice." In working with the intern and organizational sponsor, the field site can become a "learning window" for the faculty sponsor. The knowledge and insights gained from the experience can be brought back to the classroom and serve as a basis for bridging the academic world and the world of work.

Value-Added Advantage #1
The Board of Advisers As Involved Partners

The majority of CEO or presidential sponsors participating in the PI program are selected from the Hamilton Holt Board of Advisers. This helps to create an involved partnership with board members. Moreover, through these contacts participating board members become immediately cognizant of the students, faculty, and learning that is going on. This understanding and awareness can positively influence the decision making of board members and further contribute to the creation of new programs and activities. Value-added advantage #1 may be presented as an equation describing the alchemy of a vibrant relationship:

Intern/Presidential Sponsor/Faculty Sponsor + Resources
Involvement
------------------------------->
Extraordinary State of Relating + Extraordinary Results

What is the activator or energy source for transforming the otherwise ordinary into the extraordinary? It is involvement, the combined energies of the parties that provides unique opportunities for learning and growth. The PI program provides such involvement.

Value-Added Advantage #2
Strengthened Community Relations

The PI program promotes high visibility and community interest at a time when "service" is a catchword for excellence. Interns working with senior officers and top management on important projects exhibit a significant presence which can reflect positively upon the school. They represent the quality of learning and personal characteristics which the school promotes. The closing remarks of a presidential sponsor expresses this value-added advantage:

> Susan was a pleasure to work with. She was professional, organized, and thorough. It has been an honor to work with Susan in the Holt School Intern Program, and I look forward to working again with one of your talented people . . .

Such a perception reflects the commitment to learning taking place at the school. However, it also reveals Hamilton Holt's very real sense of community interest in an observable, tangible, and measurable way. If, as some say, perception is reality, value-added advantage #2 translates into a quality school that is community based, community concerned, and "user friendly."

Conclusion

This paper has described the Presidential Internship (PI) program offered at the Hamilton Holt School. A nontraditional learning experience in a nontraditional program which bridges two worlds - academia and the workplace. The two key ingredients necessary to the effectiveness of the PI program are: (1) that it be viewed as a privilege, not a right, and (2) that careful attention be given to the communication among the student intern, organizational sponsor, faculty sponsor, and program director. Based on our experience, such a program uniquely benefits all involved parties. In addition, there are value-added advantages contributing to an extraordinary partnership with the community.

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THE DELIVERY OF NONTRADITIONAL PROGRAMS

COMPUTER-BASED ADVERTISING
FOR SPECIFIC UNDERGRADUATE DEGREE PROGRAMS

Michael Bethel

Introduction

With the increasing competition and decreasing pool of potential undergraduate students facing colleges, it has become necessary to create innovative approaches to reach as large a segment of the population as possible. One such attempt is a pilot program now being formulated at Castleton State College to use computer multimedia presentation software to reach potential students with an interest in an undergraduate major or minor in Computer Information Systems. Through the use of a microcomputer based software package a graphics oriented disk will be created that will define the program, give examples of potential major or minor course combinations and emphasize the strong career opportunities that now exist for individuals with degrees in this field. This disk will then be directly marketed to a series of schools in the areas that students are drawn from. If this approach is successful attempts will be made to create the same type of disk system for additional degree programs.

CIS Program Promotion

As a member of the Vermont State College System, Castleton State College shares in the mission of this group to provide maximum educational opportunities to Vermonters. As a result of this mission, a degree program in Computer Information Systems (CIS) was created to allow students the opportunity to earn a degree in a field with recognized potential for future employment. The program was created in 1982 and experienced increasing enrollment reaching a peak of 49 students in 1987. Enrollment figures for the Fall, 1990, showed a decline in the enrollment with 29 students. However, during this time a minor in CIS was created to meet the demands of students wishing to minor in this field of study and has resulted in the increase of enrollment in courses offered within the discipline.

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While the CIS program has experienced falling enrollment, the demand for graduates with degrees in computer-related majors has increased and is projected to continue in this direction through the next decade. Both the regional and national demand for individuals with expertise in computers and computer-related fields is expected to increase faster than most other college majors and simultaneously show a marked increase in starting salaries to complement this accelerated demand.

As a result of these factors, it has been deemed appropriate to increase the recruitment of potential students through enhanced marketing of the CIS program degree. The traditional approaches used to advertise undergraduate degrees, such as viewbooks and catalogs, have not been sufficient and with the obvious emphasis in the program upon computer technology it was easy to orient the search for a new marketing tool in that direction. A computer-based video presentation was selected as the most appropriate way to differentiate the CIS program from other computer oriented degrees.

The initial phase of the process required an evaluation of software products that are currently available on the market. The software had to be able to generate a video presentation to the chosen market segment; be reasonably priced; easy to use; and once the presentation was created, an executable version had to be available for distribution. In order to help control the initial cost factor, DOS-type software that required one or less megabytes of memory and EGA or VGA color specific monitors were considered. Actual demonstrations or software samples were measured against these standards and Lotus Freelance Plus version 3.01 was selected.

Once the software was selected, the actual product was then created through a series of prototypes. The video presentation had to convey information about both the college and the CIS program in a informative as well as appealing manner. The software required a graphics and a textual component that was designed to capture the attention of the viewers. The flow of screens had to be arranged to guarantee the readability of text and supply the viewers with enough information to generate a desire for further information about the advertised product.

A series of prototypes were created and evaluated by students, faculty, and administrators to help define the product's requirements and appeal to viewers. Each incremental version of the software was then further refined to reach the stated goals. The CIS presentation video product had to be refined through a series of steps that paid constant attention to the capabilities of the manufacturer's presentation software.

Each screen had to blend into a subsequent screen in a logical and visually appealing manner. The ability to use overlays, graphics, and programmer generated drawings increased the viewers acceptance of the CIS presentation product. With the assumption that the perspective student would desire additional contact with the college a fixed screen was added to the end of the presentation containing a phone number and an address.

The computer-based presentation will be distributed during 1991-1992 recruitment period. The software will be used as a response mechanism for direct inquiries about the CIS program and also distributed to high schools and junior colleges in the market area of the college. After the recruitment period has ended a questionnaire will be evaluated to measure the effectiveness of the presentation product as a marketing tool and as a means of increasing market awareness of the college itself. If the results are positive, a series of computer-based video presentations will be created to help market other degrees and programs with the expectation that they will also benefit from the increased visibility.

THE WEEKEND FORMAT FOR GRADUATE STUDENTS: FACULTY PERCEPTIONS

Donald C. Dendinger

The Weekend Format

Description/Definition

Perhaps it is more appropriate to describe the weekend format, rather than attempting a definition. The weekend format has taken on several different meanings. For purposes of this paper, the weekend format is defined as Friday evening from 7:00 P.M. until 10:00 P.M. and all day Saturday, beginning at 8:30 A.M. and concluding at 4:30 P.M. However, in the literature pertaining to the weekend format several other schedules appear. Some go longer on Friday evening. Others include some time on Sunday. Regardless of the specific schedule set, the weekend format suggests some concentrated hours during the weekend, be it Friday, Saturday, or Sunday, in place of the traditional weekday session between 8:00 A.M. and 5:00 P.M.

Clearly, the weekend format is non-traditional. It is an attempt to accommodate students who cannot fit into the traditional format, mainly because of a traditional work schedule. Other factors contribute to this format as well. For some students, this schedule is considerably more convenient, cost effective and efficient when long distance commuting is a factor. For other students, even though they may not be working outside the home, they are able to attend classes on weekends when spouses are available for child care. A number of reasons could be suggested. In summary, this format accommodates students who do not fit into the traditional schedule, designed for the full time, traditionally aged student.

Review of the Literature

The literature reviewed for this paper is focused on the weekend format presented over the years at this Non Traditional and Interdisciplinary Conference. Related presentations were readily found. Rollyson shared the Wayne State University experience with the weekend conference. This is a concentrated two day session for their non-traditional students in the continuing education college. Excellent

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suggestions were offered regarding the weekend experience, dealing with the challenges and limitations. Generally, it was presented as an opportunity for adult learners, comparable to the quality of the weekday sessions. (Rollyson)

Shank and Brenden presented the format for the Colleges of St. Thomas and St. Catherine. In this program, the entire Bachelors in Social Work is offered by way of the weekend schedule. This effort had to meet the requirements of the Council on Social Work Education accreditation, in addition to the routine assessments demanded of any college or university. (Shank and Brenden)

Nazareth College in Kalamazoo, Michigan, has also provided a unique master's program for non-traditional students. This program was presented by Woodin, arguing for not only the integrity of the learning process, but the soundness of the program financially as well. (Woodin)

Two other programs were shared. Daily shared the model developed by Edgewood College in Wisconsin and Goldberg addressed obstacles encountered in the weekend format by reviewing the experience of Trinity College, Washington, D.C. (Daily) (Goldberg)

A final study was selected for its assessment of the weekend format. Dorsey and Pierson presented extensive data regarding non-traditional formatting, which included the weekend format. They suggest that the non-traditional schedule needs close scrutiny because of its experimental nature. Interestingly, they suggest that their data support the non-traditional format more strongly than data on traditional formatting, simply because the traditional assessments have been sparse at best. (Dorsey and Pierson) (Andrews)

Certainly, the weekend format has been a popular topic in these eight annual conferences. Not surprisingly, they have been presented in a rather favorable light. However, there is credibility since some of the programs have had respectable assessments done, and others have been balanced in presenting the strengths, challenges, and limitations of this format.

The University of Nebraska at Omaha - A Case Example

More than ten years ago, it occurred to faculty in this graduate school of social work, that some students were presented with formidable obstacles in the process of getting a graduate degree. Long distance commuting was one obvious challenge. Since this graduate program is one of a kind in a multi-state area, stretching from Iowa City, Iowa, to Fort Collins, Colorado, some 800 miles, it is not uncommon to have students commuting from three to six hours one way to attend classes. Obviously, if they could reduce their trips from 16 to 4, by way of weekend classes, over the traditional once per week format, considerable time, energy, and money would be saved.

Another obvious impediment to weekday class attendance was the full-time job, even if the student lived in the same city as the university. Thus, some relief from having all the classes during the weekday would cut down on taking annual leave and comp time.

Slowly, but with greater frequency, and with greater numbers of courses, the faculty offered courses on weekends. At this point some 940 students have taken graduate social work courses on weekends. The courses offered have been advanced research, supervision, advanced group work, foundation practice, and advanced practice courses. The limitation on the course offerings has been more of a factor of faculty interest than any judgment that this or that course could not be offered in the weekend format.

Faculty Perceptions - The Case Example

The Graduate School of Social Work at the University of Nebraska at Omaha has offered courses in the weekend format for the past ten years. The full and part-time faculty at this institution were surveyed regarding their perceptions of these courses offered in the non-traditional format for graduate students. Twenty six of the faculty responded to the survey out of a population of 26. Of these, 17 were full-time and 9 were part-time. Thirteen were tenured faculty while the other 13 were not. Ten described themselves as micro oriented, 6 were macro, and 5 generic in their teaching responsibilities. The average number of years teaching was 10.8. Eleven of the 26 had taught in the weekend format. (Faculty Survey attached)

Courses have been offered in this format 40 different times, with ten different courses being offered. The average number of students in each course was 23.5, with a total of 940 students taught. By far, three courses constitute the bulk of the experience. These three include the advanced micro practice course, the advanced group work practice course, and the social work supervision course. These three courses account for approximately 800 of the 940 students taught in this format over the past ten years.

Five questions were directed at the faculty to determine their perceptions of the weekend format. The first item sought the assessment of those faculty who had taught in the weekend format. They were simply asked if students in their weekend course learned more, about the same, or less than students taught in the traditional format. These faculty strongly or very strongly agreed that the students learned as much or more than in other formats. Eight of the eleven respondents were in this group while three of the eleven perceived students as learning less.

Faculty in general were asked the same question, even though they may not have taught in this format. This larger group responded similarly with 13 agreeing that students taught in the weekend format learned the same or more, and 5 believed they learned less.

There was strong agreement that convenience for the long distance commuter and work schedules directed the rationale for the weekend format. Twenty-two of the faculty perceived this while only two disagreed. When enhancing the learning environment was proposed, the response was about evenly divided. Nine did think that it enhanced the learning environment while eleven disagreed with this notion.

Regardless of the rationale for the weekend format, faculty were clear in their support of this format in regard to quality of teaching standards. Therefore, only 4 thought the standards were reduced in this type of teaching, while 17 agreed or strongly agreed that standards were not scaled down.

Finally, in regard to a willingness to teach on weekends, surprisingly, only 5 said they would not. Seventeen were rather clear that they would consider this schedule.

At the end of this survey faculty were asked to identify courses which they would exclude from this format. There was no clear pattern of courses which emerged. A couple faculty were quite opposed to this format in general and would exclude most if not all courses in this time frame. However, generally, faculty did not single out any set of courses with any consensus. Faculty who lectured extensively and courses demanding a great deal of outside work were mentioned as likely courses for exclusion. However, this would depend more on faculty style rather than the course itself in most cases. Interestingly, one research faculty member was a great supporter of the format, having taught a course in this way. Another research faculty member was equally against the format, having also used this schedule. So, much of the support or lack of support depends on individual perceptions and faculty teaching style.

Faculty were also asked to identify courses likely to be appropriate for the weekend format. Again, no clear pattern emerged. However, there seemed to be good support for the courses routinely offered. As mentioned earlier, these were the advanced micro practice courses and the social work supervision course. Again, some faculty urged no course be taught in this way, while others suggested most if not all the courses could be taught effectively in this format.

Summary and Conclusion

This study was an attempt to assess faculty perceptions of the weekend format for graduate students. Fortunately, there have been a number of presentations at the Non-Traditional/Interdisciplinary Programs conferences related to this format. From a review of that literature, it was clear from at least six programs, the format itself was positively perceived by faculty. Although some limitations were discussed, in no case did any institution believe the format itself resulted in scaled down standards for students.

With those studies in mind, the faculty of the University of Nebraska at Omaha Graduate School of Social Work were surveyed regarding their experience. This institution also generally applauded efforts at providing courses during the weekend format. Again, there are limitations from the perspective of the faculty, but generally, it is viewed as a quality experience for graduate students, comparable to the traditional format.

This study, as well as the other studies cited, focused primarily on perceptions of faculty and administrators. A limitation is in the lack of assessment from the students themselves. Another study with this group could well determine the quality of teaching in the weekend format from the 940 students who have participated. In almost every case, each of these students has taken most of their course work in the traditional format. Thus, they would be in a good position to judge the quality of the two formats.

This conference has provided an excellent opportunity to share non-traditional formatting for students who may not have access to higher education in the traditional format. The weekend format is one example of the experiences shared over the years at this conference. To date, with the programs presented, one can be confident that the weekend format not only provides access, but quality education as well.

The Weekend Format for Graduate Students:
Faculty Perceptions

Faculty Status: Full time 17 Part Time 9 Tenure 13 Micro 10 Macro 6 Generic 5 (Check all that apply)

Number of years teaching Social Work courses. 10.8

Have you taught a weekend course? Yes 11 No 15

If so, which one(s)? Advanced Micro Practice and Supervision

How many times have you taught a weekend course? 40

If you have taught a weekend course, what was the average number of students in the class? 23.5

Estimate the total number of students you have taught in the weekend format. 940

Overall, do you think students you have taught have learned more 5, about the same 3, less 3 than students taught in the traditional format?

Overall, do you think that the students taught in the weekend format have learned more 5, about the same 8, less 5 than students taught in the traditional format?

Convenience of long distance commuters and work schedules are the major reasons for offering the weekend format for graduate students.
Strongly agree Strongly disagree
(Number of respondents in parenthesis)
1 (13) 2 (9) 3 (1) 4 5 (2)

Enhancing the learning environment is a major reason for offering classes in the weekend format.
1 (4) 2 (5) 3 (4) 4 (9) 5 (2)

Although desirable or even necessary for our student population, I think offering the weekend format is scaling down our standards for graduate school performance.
1 (1) 2 (3) 3 (4) 4 (9) 5 (8)

If asked, I would teach a course in the weekend format.
1 (11) 2 (6) 3 (3) 4 (1) 5 (4)

List courses you would exclude from the weekend format.

List courses you think are appropriate for the weekend format.

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OFF-CAMPUS GRADUATE DEGREE PROGRAMS AND FIELD PROGRAMS IN HUMAN DEVELOPMENT EDUCATION

Robert C. Hardy
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The department of Human Development/Institute for Child Study, of the College of Education, University of Maryland, College Park, has as one of its primary goals the providing of opportunities for continuing education.

In addition to offering regular on-campus courses for undergraduates, and programs for masters and doctoral degrees, the department also offers a variety of field programs designed to enhance the knowledge and skills of those who work in human services or in human relations. In addition to upgrading professional skills, these programs have furthered the development of thousands of children, adolescents, and adults.

Our field program began in 1947 when the Institute for Child Study initiated a Child and Youth Study Program under the direction of several professors who came to Maryland from the University of Chicago to launch a program developed at that institution. This program of the direct study of school age children provided classroom teachers with the skills, methodology, and research knowledge needed to understand the factors that shape the behavior, learning and development of children.

This in-service program had two major components in which participants, under the direction of Institute consultants, first, learned to observe and analyze student behavior using the individual case study method, and, second, the participants learned to design educational or supportive strategies to facilitate the optimal growth and development of their students. The formation of small groups in which participants work closely with one another was an integral part of this program.

The Child and Youth Study Program, intended as an in-service program for classroom teachers, was successful in satisfying the needs of teachers who sought to understand and provide better experiences for the children under their supervision. Groups of teachers studying children and youth were operative in the state of Maryland, in locations throughout the United States, and in several foreign countries.

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Our success with the Child and Youth Study Program, and the growth of a full time faculty representing several disciplines related to human development, and a faculty with consulting expertise, led to an extension and application of our interdisciplinary approach in developing other types of services apart from our on-campus courses and academic programs. There are two categories of such services: Off-Campus Graduate Degree Programs (Ph.D. and Master of Education) and Field Programs, each of which will be discussed in turn.

Off-Campus Graduate Degree Programs

Master of Education Program

This paper presents an alternative delivery system that has been successfully implemented by the Department of Human Development of the University of Maryland. The system has been in operation since 1978. The first program was started in Garrett County, a community in the Appalachian Mountains of Western Maryland, 180 miles from College Park. Subsequent programs were developed in St. Mary's County in Southern Maryland, Baltimore City, Eastern Shore of Maryland, and in the country of Bermuda. Each program has followed a similar model with slight variations added to fit the local situation.

In the development of the program, several criteria were considered which are as follows: (1) a need for a program existed in the area, (2) there would be no sacrifice in the quality of the program delivered, (3) faculty time and resources would not be unduly strained, (4) the program was financially self-sufficient, and (5) admission standards would be the same as on-campus programs.

In September of 1978, 23 Garrett County students were enrolled in the first program, and in May of 1981, 22 received their Master's degree. A second cohort was started in September of 1981 and all students graduated in May of 1984. A third cohort was started in Garrett County in 1988 with 21 students, and 20 are expected to graduate in Spring 1991. Similar results were obtained in other settings. The program offered in Bermuda collapsed the course work into 2 1/2 years with all but one student graduating, however, some of these students required the extra half year to finish all their papers.

The particularly unique aspects of the delivery system include (1) block scheduling, (2) total group seminars under the leadership of a team of University of Maryland faculty, (3) small group sessions under the direction of trained participant/leaders, and (4) the use of directly-observed behavior as the medium and basis for the discussion of a large portion of the program content.

Scheduling

During the first two years of the program, all students enroll for the same nine credit hour block that runs from September through May. Once a month the total group meets with a team of University faculty on a Friday evening and all day Saturday. In addition, all students are required to meet approximately every week in small groups of 7 to 10 for 2 1/2 hours on a late afternoon or early evening under the direction of a participant/leader. Participant/leaders receive training and guidance from the faculty team during a special session each month.

In the third year, students choose from among several offerings based on individual interests and needs. By scheduling the monthly weekend meetings/seminars a year in advance, participants are able to keep those weekends free from any competing activities.

Cooperative Planning and Teaching

One regular faculty member serves as the coordinator of the program for the total three-year cycle. Each of the three years a team of two additional faculty members works with the coordinator. The other two members of the team change each year so that the participants benefit from learning from at least seven different full time faculty members.

Each year's faculty team is responsible for the program content for that year. While students register for three distinct courses, the content of the courses is organized and synthesized into one overall experience by the faculty team. While each member of the team takes primary responsibility for certain portions of the content, all three members of the team are present and participate in all of the total group seminars on Friday evenings and Saturdays.

Each small group holds one of its weekly meetings on the Thursday evening prior to the Friday and Saturday total group seminars. One member of the faculty team meets with each of the small groups on that Thursday evening meeting to give guidance and consultation to the small group process.

Small Group Activity

The small groups of 7 to 10 meet weekly under the direction of participant-leaders. The participant-leaders receive training and direction during special sessions with the faculty team. Small group activities are carefully planned and guided and are of three basic types: (1) specifically assigned activities that follow up or prepare for content that is presented and discussed by the regular faculty during the total group weekend seminars, (2) discussion of published research and theoretical literature related to the content of the seminars, and (3) processing of the anecdotal records based on directly observed behaviors. The processing of the information in the records follows clearly outlined procedures.

Direct Observation of Behavior

One of the unique advantages of offering a program on-site is that it provides the laboratory for direct observation of student and teacher behaviors. To take maximal advantage of this opportunity, the direct observation and recording of behavior is an integral and important aspect of the entire program. Participants are trained to observe and record behaviors objectively and to withhold immediate judgment about causes of behavior.

Participants' anecdotal records of directly observed behavior form the basis of an important portion of the program content. In the first year, the direct observation focuses on the forces which influence the behavior and development of children and youth. In the second year the direct observation focuses on factors which affect students' academic behavior and achievement. The direct observation in the third year focuses more on teaching behaviors.

First Year Program Content

The first year of the program focuses on understanding forces which affect the behavior and development of children and youth. The forces considered are organized according to a six-area framework: physical, affectional, socialization, peer, self-developmental, and self-adjustive.

Lectures, discussions, readings, papers, and projects done by the students are primarily in the following areas: (1) biological bases of behavior, (2) social bases of behavior, (3) peer group processes, and (4) affectional relationships and processes.

Each participant keeps an anecdotal record (case study) consisting primarily of directly observed behavior of a child or youth selected by the participant. In selecting youngsters for the case study, care is taken to be sure that those selected represent a wide variety. The children chosen by members of each small group should include boys and girls, a wide range of academic success/failure, and children seen as model children and those seen as having behavior problems.

During this first year, participants register and receive credit for the following 3 semester credit hour courses: (1) Introduction to Human Development and Child Study, (2) Biological Bases of Behavior, and (3) Social Bases of Behavior.

Second Year Program Content

The second year of the program focuses on (1) the identification and understanding of factors which most significantly affect academic behavior and achievement, and (2) the development of a repertoire of techniques/skills/strategies for positively influencing academic performance.

Lectures, discussions, readings, papers, and projects are primarily in the following areas: self-processes in human development, learning theory, models of teaching, educational and psychological measurement, research methods, and basic applied statistics.

Each participant again keeps an anecdotal record consisting primarily of typical and revealing behavior of one child or youth observed in an academic situation. As during the first year, these records are processed during a portion of the weekly small group meetings.

During the second year, participants register and receive credit for the following 3 semester credit hour courses (1) Integrative Bases of Behavior, (2) Learning Theory and the Educative Process, and (3) Quantitative Research Methods.

Third Year Program Content

In contrast to the first two years, students register for independent course experiences rather than for a "block." This provides for some individualization of programs according to needs and interests.

The courses offered are "team taught" by the University faculty and use the combination of total group seminars and small group meetings, but participants register for specific courses which meet at distinct times.

Ph.D Program

The Department of Human Development has offered a doctoral program for several years at Salisbury on the Eastern Shore of Maryland. Since there are no doctoral programs at the state colleges in that area, this program provides an opportunity for individuals who have a Masters to work toward a higher degree. The first group of students in this program earned their Ph.Ds within the last two years; the current group of 18 students completed their course work in May 1990 and are now at the dissertation stage.

There are some similarities between the doctoral program and the Master's program described earlier, the primary one being the formation of small study groups at the beginning of each academic year. The purpose of these groups at the doctoral level, as at the Master's, is to promote an exchange of ideas among the students and to provide an opportunity for group decision making and problem solving. Thus the group serves as a sounding board for reacting to assigned reading material, for designing group projects, and for preparing for examinations.

A student leader is chosen by each group, and the faculty work with the leaders to prepare them to direct the work assigned to the groups. Three hours of credit can be earned each academic year for leading a group. The groups meet for three hours each week, and once a month the faculty members who are teaching the off-campus classes that semester meet with the groups.

The study groups are probably even more important at the doctoral level than at the Master's because they serve as support groups through the heavy demands of a doctoral program. The off-campus students become quite close not only because of the support groups but also because they are together in the same classes throughout the program. We do not see this feeling of comradery in our doctoral students at College Park probably because the students don't have the study groups, and the programs vary for each student, consequently they have few classes together. We find that a higher percentage of the off-campus students complete their degrees--the dropout rate is considerably lower than on the College Park campus.

As for staffing, all of the classes in the off-campus doctoral program are taught by the same professors who regularly teach the same courses on the University of Maryland campus. Classes are scheduled for one long weekend a month--i.e., Friday night and all day Saturday. Faculty members are not required to teach in the off-campus program, and some prefer not to because of the weekend commitment and the three hour drive to the off-campus site. Other faculty, however, choose the off-campus teaching assignment, particularly if they prefer to work with older students who are from different professions and because it offers them flexibility in scheduling. All faculty members are available to serve as advisors to the off-campus students, whether or not they are teaching in the off-campus program.

The syllabus for the doctoral program includes three or four, 3-hour courses each academic year. Human development content courses cover the areas of socialization processes, physiological processes, self-processes and learning theory. In the methodology area, the students take three statistics courses, and complete one course in research design. In the last two semesters of the program the study groups become research teams and each student designs a study, collects data and analyzes the data.

By the end of four years, students in this program have completed 45 hours of course work and have finished their preliminary examinations. They still need to take 12 hours of credit for completing their dissertations, and three more class hours in order to fulfill the 60 hour requirement beyond the Master's. These 3 hours may be completed with an independent study project or with a course taken on the College Park campus or at another University.

Each year the students are assigned a special project to complete in addition to other course work. The first year each student completes a case study; the second year he/she designs an action research project; the third year the student completes a social policy study; and in the fourth year pilots a study for the dissertation, usually an outgrowth of work on the research team.

As mentioned earlier, all of these doctoral students come into the program with a Master's degree and have met the same admission standards required of regular on-campus students. We find that the types of students who enroll in the doctoral program are quite different from applicants to our Master's program, most of whom are public school teachers. In contrast, the doctoral students represent a more diversified group of professionals, including nurses, social workers, therapists, counselors, and teachers at state colleges. This diversity makes for a rich and vibrant program, and these affiliations allow for the adaptation of human development principles and knowledge to the several professional areas represented.

When it comes time to write a dissertation, most of these students choose topics related to their professional interests. For example, a college admission counselor looked at whether having chosen a major soon after entering college related to how long the student stayed in school. A health department counselor is studying the relationship between alcoholism in a family and adolescent suicide.

We have found that offering our doctoral program at a location where there are several state colleges has several advantages. One is that local library facilities are available to our students including inter-library loans with all of the college libraries in the state. Also the catalog system can be reached by computer.

Another advantage in this location is that it provides an opportunity for faculty members at the state colleges to complete a doctorate. Fortunately, human development as an area of specialization is applicable to many disciplines and can be focused on different goals--e.g., learning more effective teaching skills, expanding administration skills, or gaining a better understanding of human behaviors.

Finally, even though the doctoral program described is off-campus, we want these students to have frequent contacts with the College Park campus. Consequently, we plan a seminar each semester which the students attend in College Park, followed by a reception for the students given by the faculty. They also come regularly to meet with their advisors. Toward the end of their course work, the students give oral presentations to our faculty and graduate students describing the research they have completed while on a research team.

We feel that by offering an off-campus doctoral program we are providing an opportunity to individuals who cannot come to the College Park campus to earn advanced degrees, and to enhance their professional skills.

Field Programs

Courses and programs, with or without academic credit, have been developed by our faculty to meet the needs of diverse groups. Service programs are available at the College Park campus, or on-site in educational, religious, governmental, business, or other professional settings.

The knowledge and skills of our faculty have been applied in developing the following types of services:

School-Based Programs

Communication Skills
Dealing with Teacher Stress
Direct Study of Young Children, Pre-Adolescents, Adolescents
Drug-Free Education
Early Intervention: Middle School
Peer Relationships and Social Skills
Self-Concept in the Middle School

Other Organizations

Building Friendships (Adults)
Child Assessment (Psychophysiological)
Conflict Resolution (Courts)
Telephone Divorce Mediation (County)
Helping Families of the Mentally Ill (Nationwide locations)
Parent Education and Support (County)

In all of our programs, our goals are:

- to present the essential information about a topic or a problem
- to teach the necessary skills or techniques for applying this information, and
- to create appropriate research and evaluation components.

The major features and strengths of our programs are:

1. On-site courses offer convenience and service to students/participants who reside or work varying distances from the main campus.
2. Adaptability and flexibility in programs meet the needs of specific groups relative to content, skill development, and duration of program (somewhat less flexible for degree programs).
3. Comradery develops among students/participants who remain together over the duration of the program.
4. Flexibility in programs allows for necessary adjustment created by unique circumstances in on-site settings.
5. A faculty, talented in diverse skills and abilities, that is experienced and dedicated to off-campus activities to serve the needs of others.
6. Program standard and quality are not compromised.
7. Opportunity to receive academic credit (or advanced degrees) while upgrading professional skills.
8. Programs focus on the application of knowledge in dealing with the problems and concerns of students/participants.
9. Programs provide the potential for personal growth.
10. Programs have the potential for improving the morale and functioning of an organization

Summary

The body of knowledge which comprises human development has wide application in a variety of agencies, institutions, and organizations that are concerned with the growth, development, and well-being of persons. An awareness of the principles and concepts of human development enhances the personal development of individuals and contributes to their effectiveness in working with others.

For over 40 years, the Institute for Child Study/Department of Human Development has had success in developing and delivering both off-campus degree programs and field programs which can be adapted to serve the needs of diverse groups.

THE USE OF COMPUTERS IN DISTANCE EDUCATION

Robert D. Herbster

Introduction

The purpose of this presentation is to describe the use of computer technology in a nontraditional program. The discussion will focus on the importance of communications in distance education and how the use of computers and computer telecommunications can enhance communications. The presentation will also address the obstacles to using these technologies.

Thomas Edison State College

Thomas Edison State College was founded in 1972 as an institution totally devoted to nontraditional education for adults. It is an external degree institution which has no specific requirements for the number of credits that must be earned through the College. In fact, no resident instruction is offered. The College does, however, offer a limited number of video based courses through the Guided Study program.

The College offers degrees in liberal arts, business, technology, human services, and nursing. The nursing program is at the baccalaureate level only. All other disciplines offer associate and baccalaureate degrees. These degree programs offer concentrations and options in over 120 areas. Degree requirements are traditional. They are normally patterned after the offerings of traditional colleges.

The nontraditional aspect of the College is the methods it allows students to use to complete degree requirements. Students earn credits for their chosen degrees through any combination of the following methods: transfer from other regionally accredited college, college level examinations, American Council on Education recommendations, credits for various licenses, Guided Study courses, and Portfolio Assessment of experiential learning. The student is free to choose which method or methods he or she wants to utilize. For the sake of brevity, I will use the term "subject" to refer to any credit bearing collegiate experience. Students receive a Program Planning Handbook and the assistance of academic advisors to aid in the selection of the methods to be used.

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Transcript Evaluation and Program Planning

Since its inception, the College has evaluated students' credits by assigning the credits toward the students' degree requirements. Since students seldom, if ever, appear at the college's offices, it was deemed essential that they receive a clear understanding of their status in light of their degree requirements. The underlying precept was that it was necessary for the institution to communicate clearly with its students.

The subjects a student has completed are entered on a document presently called an Evaluation and Progress Report. For the sake of brevity, it is usually called an evaluation. In a sense, the Registrar's Office performs a degree audit or graduation check every time new credits are presented. As the College developed its academic advisement system, the advisement staff found that it was convenient and understandable to enter approvals for future subjects on photocopies of the student's transcript evaluation. The approvals were entered into the degree requirements which they would satisfy. This document was called a Program Plan or plan, for short. To expedite handling, evaluations and plans were hand written and then photocopied. Legibility was sometimes a problem. The manual system posed other problems. Since the plan was on a photocopy of the evaluation as it looked at the time the plan was initiated, the plan might seem to indicate that a student intended to complete a certain subject, but, in fact, the most current evaluation would indicate that the subject was actually completed. Dropping, adding, and moving approvals was also very inconvenient since it was necessary to manually eradicate earlier entries and then recompute and change the previous totals.

It should be noted that approvals are very specific. For example, if a student plans to complete his or her remaining Social Science requirement by taking HIST 201, American History to 1877, 3 semester hours, via correspondence through the University of Nebraska, the plan will reflect that that specific course from Nebraska is approved. Experience has shown that approvals must be very specific to avoid any possibility of confusion. That entry remains on the plan until the student submits a transcript showing successful completion of the approved subject or the student requests approval for an acceptable substitute.

When the College initiated efforts to computerize student records, there were three critical elements that had to be addressed. The software would have to be able to identify the original sources, course numbers, titles, and credits (in semester hours and quarter hours) of the subject entries. The subjects had to be able to be assigned toward a student's requirements. Finally, the software needed to accommodate the approval of subjects that were not yet completed. Commercially available software did not seem to address these problems so the College's Management Informations staff wrote custom software to address these unique problems. The staff wanted the best of both worlds: The ability to enter and manipulate a great variety of subject entries and have the software compute credits earned, approved, and remaining as well as compute quality point averages. The software satisfies all of these requirements.

A student still receives transcript evaluations and program plans. Since the documents look similar, they are printed on different colored papers to avoid confusion. The evaluation shows only those subjects for which official transcripts have been received. The plan also shows completed subjects but also includes the approved subjects the student plans to complete. The prior problem of differentiating between completed subjects and planned subjects is resolved because the transcript evaluators remove the approval when transcribing the completion of the approved subject. Dropping, adding, or moving approvals can be accomplished in a few seconds without fuss. Advisors can approve alternate methods for completing a specific requirement. When the evaluation is completed, the software computes the credits completed, planned, and remaining for each specific requirement and an overall summary of the student's status. The system also computes the student's quality point average.

In addition to emulating the manual process, the computer allows the staff to perform other functions that were not easily performed in the manual system. Both the plan and evaluation now allow the staff to enter free form, individualized information in the "Notes" section. The staff also has access to a "Stock Notes" section which will print out standard statements for situations that are common to many students. There are also standard "Comments" which can be attached to any subject on the evaluation or the plan. When one of the standard comments is used, the program automatically prints the explanation of that Comment. Staff can also enter a personalized Comment to a specific subject which the staff member would explain in the Notes section. There is also a function in the data base that allows the requesting of standardized "Enclosures" to the student. The Notes, Comments, and listing of Enclosures are part of each student's computer record and can, therefore, be quickly accessed when viewing the student's record.

Although Thomas Edison State College does not have a file of traditional courses in the data base, there is a list of standard subjects which advisors and transcript evaluators can access. For example, if an advisor wants to approve the CLEP examination in Educational Psychology, the advisor can access that entry through a menu and write the subject number, title, and credits to the student's plan. The software also displays the description of a subject before the advisor assigns it to the student's plan. This allows the advisor to review the content before deciding to approve it. The data base also contains the subject numbers, titles, credits, and course descriptions for thousands of subjects which students have used as a basis for the assessment of experiential learning.

Transcript evaluations and Program Plans form a continual cycle which proceeds, ultimately, to graduation. The cycle begins during the admissions process with an evaluation of all prior credits. If the student enrolls, Program Planning begins. The plan is, ideally, the next 15 to 30 credits. As the student completes the approved subjects he or she requests additional approvals and has the official transcripts forwarded to update the evaluation. The plan does not indicate the order the approved subjects will necessarily be completed or the particular term they will be taken.

The benefits to computerized transcript evaluations and program planning are myriad. The staff of the Registrar's Office is freed of the drudgery of computing credits completed, credits remaining, quality point averages, etc. Advisors also have the benefits of the computations and are also freed of the time consuming tasks associated with handling of hard copy files. There is little paper pushing. The student benefits by have a clearly mapped out plan for completion of his or her degree requirements and having quicker responses to inquiries.

The objective of computerization was to present a clear a map of the student's current position, academic itinerary and ultimate goal. Providing an academic map of the student's progress is a convenient way of presenting information to both staff and student. This is especially important when working with students who are not on campus, but the procedures can also be used with traditional full time day students. By displaying credits earned against degree requirements an advisor and a student can see trends that are developing. Perhaps a student is earning better grades in Social Sciences than in his or her Biology major. Perhaps the student has been avoiding a critical degree requirement. If a college waits until the start of the first semester of the senior year to perform a graduation check, a prospective graduate may have an unpleasant surprise when the academic audit is received. Such problems can be avoided by performing transcript evaluations or academic audits after every term's grades are posted.

It is important that colleges communicate clearly with their students. Computers can aid greatly in this communication process. They should be utilized to do what they do so well: rapidly present and manipulate data and perform numerical computations rapidly and accurately. An institution can take advantage of these attributes to provide a picture of the student's progress toward his or her academic goal.

The use of any technology has a price associated with it. The most obvious cost is the cost of hardware and software to accomplish the goal. There is also the cost of training staff to use a new system. The first step in training is to convince staff that there is a benefit to using the new technology. There is a normal reticence to change from the old practices which must be overcome. There will certainly be teething problems. I will not insult your intelligence by telling you that computers are fool proof. The computer is a both a powerful tool and a powerful fool. The users must be trained to understand what the software is doing. Programmers cannot be satisfied in writing software that just does what it is supposed to do; they must incorporate safeguards to prevent the system from not doing what it is not supposed to do. Unanticipated problems almost always crop up when any new system comes on line. There are always enhancements and improvements that can be made. Despite these problems it would be difficult to convince the staff to return to the drudgery and confusion of the manual methods that had been used. Advisors can spend more time actually doing academic advisement and less time pushing paper. Students apparently understand the new communications methods better. Not once have I heard a student comment that the old procedures were better.

Computer Assisted Life Long Learning

Another aspect of modern technology which the College has instituted is the Computer Assisted Life Long Learning, or CALL. The development of this network was funded through a grant from the Governor's Challenge Grant Program through the New Jersey Department of Higher Education. CALL consists of three distinct parts, the CALL Network, the Public Bulletin Board, and Guided Study on CALL.

The Public Bulletin Board is designed for individuals considering applying to the College. It allows the prospective student to access more detailed information about the College's programs, send electronic inquiries to the admissions staff, and even complete the application for admissions electronically. Hardware requirements are relatively nominal.

The CALL Network is for enrolled students of the College. It allows the student and staff to send electronic messages to each other. The student can also examine his or her program plan and financial status with the college. The main advantage to the student is that it saves the time that is normally spent in handling paper correspondence. Also, the student has instant access to the current status of his or her records. The staff is saved the time of handling paper.

The third major component to CALL is Guided Study on CALL. An explanation of Guided Study is in order. Guided Study is the College's program for offering video based instruction. The students view the video lectures, read the assignments and prepare written assignments in accordance with the study guide and instructions from the mentor. The assignments must be submitted in accordance with the prescribed schedule.

Unlike most of The College's activities, Guided Study is offered on a regular term (semester basis). That is, there is a specified registration period, schedule of assignments, and final exam period for the courses.

Guided Study students who are not participating in the CALL network send and receive their lessons by postal mail and call their mentors during prescribed office hours when such discussions are necessary. The students would not likely have any kind of contact with the other students in the course.

Guided Study students who take the course through the CALL network use electronic mail to submit lessons, request assistance from the mentor, and review other students responses to discussion question. The mentor responds to the students via electronic mail. CALL students may also contact the mentor via telephone if they so desire. The major advantage to the CALL network option is that information can be transmitted much faster than by traditional mail. Also, the ability to view and respond to the comments of other students emulates the exchange of ideas that takes place in the classroom.

At present, the CALL Network is being operated through a time share arrangement with an outside vendor. Thanks to a substantial grant from Digital Equipment Corporation, the College is in the process of obtaining the necessary hardware and software to operate the Network in house. The MIS staff anticipates that the new system will allow greater control and enhanced services.

The major hurdle to developing such a communications network is the monetary cost. The College has been fortunate to receive two grants to offset some of these costs. The other hurdle is getting students to take advantage of this technology for improved communications. The office which administers the Guided Study program actively promotes the Guided Study on CALL option. The College has also developed a brochure encouraging potential applicants and students to use CALL.

Conclusion

There should be no doubt that computers can enhance communications by rapidly and clearly displaying and transferring information; however, no technological improvement comes without drawbacks. Even if a new system is completely superior to the old system, there is always a cost for converting to the new system. With computers the costs include hardware, software, training, and promoting the use of the system.

AVOIDING THE "RUN-AROUND": THE COMMUNITY EDUCATIONAL REFERRAL INFORMATION SYSTEM

Sylvia R. McLaurin

To many adults the term "educational opportunity" means formal schooling such as that provided by colleges and universities. Most adults acknowledge the truisms of a college education--to acquire factual information and professional training, as well as to develop multicultural awareness, critical thinking and analytical skills, liberalized societal purview, increased aesthetic sensibility, career and communication skills. Yet for many, the opportunity to learn that is best suited to their needs may be provided by one or several of the numerous information/training agencies, such as cultural institutions, human service organizations, business and industry, and recreational services, in their communities.

A problem central in connecting the learner with the appropriate learning situation is obtaining information about the programs in a direct, accurate, and timely fashion. For many adults attempting to find specific educational programs in the community is at best a hit-or-miss telephone marathon or at worst a barrage of misinformation; both do almost irreparable damage to the public image of specific programs and often discourage the potential learner from pursuing educational goals. Eugene Kelly, in his insightful "fastback" on adult education accessibility pinpoints this informational shortcoming as part of a larger problem--a lack of a comprehensive educational system:

> We tend to identify education with schools and colleges. But this is a much too limited view. Education takes place in a wide range of diverse settings throughout our society in cultural institutions, human service agencies, business and industry, and recreational and leisure institutions, to mention only a few....At present there is no systematic connection of education across diverse settings. Educating units operate independently of one another, frequently in ignorance of one another and sometimes at cross-purposes. This lack of connectedness results in duplication, gaps, and discontinuity, and their attendant costs. Perhaps even more important, disconnectedness in educational practices works against the achievement of major educational goals for all our citizens.[1]

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In addition to the problems this disconnectedness causes the adult learner is the problem created for educational providers. As Leslie Goldgehn points out, the educational "market" today is a "buyer's market." Educational entities face "changing buying patterns, increased competition, increased sales expenditures."[2] This marketing climate requires tremendous effort to encourage the adult learner to enroll in providers' programs, yet the prevailing mode of informational hide and seek discourages enrollment.

The adult seeking educational information generally brings to the search two questions:

a. What kind of information/training is desired?
b. What kind of information/training is available?

Neither is a simple question, for while many adults do have specific course demands and even an educational plan in mind, many others have only a general concept of the training or information desired. Most educational entities have developed publicity of some kind such as newspaper advertisements, radio announcements, catalogs, flyers, brochures. But even the best designed publicity cannot answer all the potential learner's questions. While the provision on the program material of a phone number and/or mailing address is helpful, the contact person often can give information about only his/her own program, and, therefore, cannot assist the inquirer to survey other similar learning opportunities. The inquirer, then, must make a series of calls to different entities. For example, an adult wishing swimming instruction might have to call separately about a college credit course, a college non-credit or extension course, a Red Cross course, a YWCA course, a YMCA course, a city recreation department course, or a Senior Citizens Center course.

The problem of information access is even more perplexing when it centers on one institution. Departments in large educational institutions are not necessarily well informed about the services of other departments within the same institution. An adult learner may call the information number for a state university to inquire about instruction in Spanish. The inquirer is told to call the romance languages department. He does so only to be transferred by the secretary of that department to a faculty member who, upon discovering the caller is an adult learner interested in a single course, tells him to call the adult education department. At that number he is transferred to night school credit courses and then to correspondence courses; upon the revelation that he does not necessarily wish academic credit, he is told to call non-credit community classes. He has been referred to six different sources of information. While the problem is due in part to the fact that the caller failed to articulate his particular course requirements, the telephone "run-around" is all too common when potential adult learners seek educational information.

To look at this problem of accessing information from the educational agency's standpoint is to see it as a crucial barrier separating the learners from the class, or in marketing terms, the client from the program. As numbers of students of traditional college age decline, educational agencies of all types have watched the growth of adult education (non-traditional or continuing education) with great interest both from an economic and a sociological standpoint. Leslie Goldgehn notes in her study of over 650 post-secondary institutions nationwide a 90% increase in institutional marketing over the past 10 years.[3] Multiple studies of adult learners, however, reveal the fragility of initial contact between the agency and the potential learner. The first phone call may be the last if the inquirer is not satisfied with the handling of the inquiry. Moreover, given the entire schema of variabilities and complications as an adult attempts to fit an educational experience into an already busy life, a less than satisfactory inquiry may extinguish any desire actively to pursue learning. Making the initial contact simple, clear, and helpful encourages the inquirer to follow-up the questions with action.

However, many educational providers, particularly those in colleges and universities, still balk at effecting overt marketing techniques, while yet recognizing the need for recruitment. Perhaps a suitable middle ground between ignoring the problem and active solicitation is the development of a strong public relations plan. Peter Cookson defines such a plan as a series of "activities undertaken to project a favorable image of a particular educational organization...[that] aim not at promoting acceptance of any one program but at establishing general awareness and positive attitudes toward both the sponsor and the range of services offered."[4] Even done well, public relations may or may not impel a potential student to enroll in a particular program. What is accomplished by sound public relations is the establishment of positive attitudes in the community toward education and educational entities, attitudes that ultimately bear fruit in increased program enrollment.

The ideal public relations technique is one which establishes good relations between the educational entity and

(a) the potential students
(b) the community at large
(c) other educational entities

through service. In his discussion of educational strategies, Richard Treadway suggests the establishment of an informational system that would satisfy these public relations goals and provide a valuable service to potential adult students. Treadway suggests a toll-free number which a potential student could call to obtain information about educational opportunities in the area.[5] This concept presupposes, then, that the entity called will act as an educational clearinghouse that will acquire basic information about a variety of programs in the community and will have a method for filing and updating this information.

In this vein the Evening Classes Department of the Georgia Center for Continuing Education, based at The University of Georgia, has developed CERIS--the Community Educational Resource Information System. Essentially a telephone advisory system, CERIS enables the caller to obtain basic information about various courses, seminars and sessions in the community that are available to the adult. The system has been initiated as a response to the informational needs of potential students in a six-county area with an adult population of over 100,000. For educational information area adults often contact Evening Classes (EVCL), a known adult educational provider which circulates to the community a quarterly course listing of University of Georgia courses available in the evening. While many callers are seeking information about college credit courses, many others indicate learning needs for which university courses are not designed. Evening Classes personnel feel that vague information and casual references to other organizations are insufficient responses to these potential learners that sustains the telephone "run-around" that is detrimental to continuing education. Thus CERIS has been evolved to organize community educational information and dispense it quickly and accurately. It is a system designed to be updated and corrected regularly so that information is current.

To collect information categorically, the system designers have established basic guidelines regarding providers and areas of educational opportunities. As part of a major university, Evening Classes realizes that dispensing information could be construed as an endorsement. Therefore, a decision was made to list educational opportunities offered by non-profit, public service organizations and institutions only. Excluded are church-related entities, proprietary schools, and any organizations offering services for profit. Typical providers listed include community service organizations, botanical gardens/parks, college, technical school, university, public school system, city/county government, libraries/museums, hospitals/health care entities, cooperative extension service, public utilities.

Basic categories are used to classify program offerings. These categories include the following (here listed with examples):

Basic Skills--adult literacy, basic math skills, GED

Communication Skills--public speaking, office communication

Cultural Education--music appreciation, Renaissance artists

General Education--environmental awareness, real estate, civil war history

Health and Safety--pre-natal care, defensive driving, exercise for the elderly

Home and Family--herb gardening, oriental cooking, parenting, budgeting

Personal Skills--assertiveness training, time management

Skill Training--computer skills, calligraphy, golf

Miscellaneous--dog training, intermediate bridge

Sub-categories and program entries classified in a particular category are cross-referenced to related items in other categories.

A set of informational data was obtained through telephone and personal contact with educational entities in the community. This set included the following information:

1. Name of the program
2. Name/address of the sponsoring entity
3. Name of the appropriate contact person
4. Appropriate telephone contact number
5. The program's target audience
6. Fee charged, if any
7. Date, time, place of the activity
8. Enrollment deadline

As callers are encouraged to call the program contact person, only a minimal set of data is gathered. In this way potential students can be assured of obtaining accurate information, including last- minute changes in the particular programs. Program contacts are asked to send any literature available on the program and on the sponsoring entity to the supervisor of the CERIS system. When appropriate, EVCL also uses this contact opportunity to explain its own program to other service providers and to send program literature so that the educational referral can be reciprocal.

Once information is collected, it is entered into a computer database accessible by departmental staff and advisors through computer terminals or cardfiles. The WordPerfect system is used as follows:

- The data is categorized in directories corresponding to the main divisions listed above. A matching disk was backed up for each directory. Files are set up using key terms from program titles. The data entered for each category (see above) is also cross-referenced to programs in other divisions. The data was stored on hard disk and printed out on Rolodex cards for those staff members who do not have computer terminals.

- CERIS is updated regularly. Program contacts are called or visited approximately every three months. Contacts are also requested to alert the system personnel to new program providers in their subject areas. County and city newspapers and other public information sources are monitored for information about educational opportunities and providers.

- Inquirers access CERIS by calling a single Evening Classes number that is publicized as the educational referral number. Calls are answered directly by receptionists or, when needed, by the pre-admissions counselor or another advisor. A running tabulation is kept on inquiries by subject and program referred. Should a number of calls be received for programs not currently available, this information is given to the appropriate educational entity. A separate record is kept on any caller who may be interested in credit programs. In such instances name, phone, and mailing address are requested and filed for appropriate follow-up action.

While the CERIS system is a very useful public relations tool, it provides an even more important function in breaking down educational barriers. Data on adult education clearly reveals that only about 30% of the adult population engages in formal education. Steven Graham speaks for many studies when he notes that most adult learners are middle-to-upper class individuals who have had some college level education and are "upwardly mobile individuals often employed in responsible positions."[6] Even given the numbers of homemakers, young working adults, and former dropouts found in the evening classroom, far too few adults feel they have access to continuing education. Whether the barriers are real or imaginary, to an adult difficulty in obtaining information about a program can be as great an educational deterrent as the standards of admission criteria, or course difficulty, or tuition costs. It is the socio-economic underprivileged, the very group most in need of further education that is also in greatest need of informational access, for this group is the least familiar with educational avenues. Equal access goes beyond admission criteria to the accessibility of programmatic information in the beginning. Moreover, studies indicate the importance of sound academic advising in the process of continuing formal education, yet many adults have not the slightest idea how to go about getting this advising so as to know what educational path is right for him or her.

A key factor then in the CERIS system at Georgia is the personnel involved. Evening Classes has its own staff of trained academic advisors who are expert in many facets of advising from assisting with the planning of core curricula and transfer of credits to asking appropriate questions for determining what kind of educational program the caller is really desiring. All advisors are given an orientation session to CERIS with a special session on determining accurately the educational goals of an adult student.

Adult educational providers are becoming increasingly sensitive to the needs of burgeoning numbers of adult students. However, adult educators must be prepared to surrender the often cherished educational "Monroe Doctrine" that has prevented general collaboration among educational units in the community. With ever-expanding adult educational demands, educational units can retain their specialization, but program survival depends more and more on cooperation with other educational entities. As Eugene Kelly maintains, the time has come for dialogue and broadened awareness within the total educational environment.[7] In 1978 such collaborative interface became governmental policy through the passage of the Community Schools and Comprehensive Community Education Act, which promotes entity interaction as "responsible and responsive colleagues in an integrated system....[through] closer cooperation generally on educational matters by the school, college, corporate, and human services sectors."[8] However, with rare exceptions interagency cooperation has yet to become a viable part of community educational planning.

Collaborative efforts, such as CERIS, benefit everyone concerned. By increased contact with the public, the evening sector of the University gains greater contact with potential adult students, positive outreach reputation, and information for program planning. Constituent programs are given referrals that benefit them in much the same way. Adult students are given quick, accurate, and convenient access to educational information that not only may motivate enrollment in a current program but sets an encouraging tone for continuing education. The ultimate beneficiary is the community, as through increased access to educational opportunities its populace raises its level of skills and knowledge for the improvement of its well-being and its prosperity.

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1. Eugene W. Kelly, Jr., Beyond Schooling: Education in a Broader Context. Bloomington, Indiana: Phi Delta Kappa Educational Foundation, 1982, p. 6.

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5. Douglas Treadway, Higher Education in Rural America: Serving the Adult Learner, New York: College Entrance Examination Board, 1984, pp. 42-44.

6. Steve W. Graham, "Assessing the Learning Outcomes for Adults Participating in Formal Credit Programs," Continuing Higher Education Review, 53(2-3), Autumn, 1989, pp. 75-76.

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TELECOMMUNICATIONS SOLUTIONS FOR SERVING PLACEBOUND GRADUATE STUDENTS: THE UNIVERSITY OF OKLAHOMA EXPERIENCE AT THE UNIVERSITY CENTER AT TULSA

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Abstract

Higher education institutions are utilizing telecommunications methodology more and more in regular and non-traditional course offerings. This paper is a discussion of the University of Oklahoma's utilization of two technologies by the School of Library and Information Studies to deliver its masters degree program to students at the University Center at Tulsa, an urban upper division higher education site some 130 miles distant from the University's main campus in Norman.

One technology, modem-based communication, connects students and other interested state information professionals from approximately 20 different locations in Oklahoma to provide interaction between faculty and one another. A second technology, compressed video course delivery, is used to deliver totally interactive courses from either site, Tulsa or Norman, to the other. The discussion will include a description of each information/ education technology, and a consideration of plans and potentials.

Introduction

The university of the twenty-first century will be a university for the adult learner. This learner, however, has the typical barriers of too little time and too much distance between the learning situation and the resources. Therefore, telecommunications technologies will be more and more valuable resources to those who attempt to serve the adult learner, bridging the distance gap and helping reduce the constraints on time. Careful instructional design can provide maximum effectiveness of the messages at a minimum expense for the technological methods (Rigeleuth, 1983).

When comparing instructional methodologies, studies have generally shown no significant learning differences between those based on technology and those not based on technology (Chu and Schramm, 1975;

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Dillon and Strohmeyer, 1983; Weston and Cranton, 1986). Indeed, several studies have indicated that the important factor is the attitude of the students toward the medium (Dillon, Haynes, and Price, 1990; Titsworth, Hess and Hawkins, 1991). Attitudes range from very positive to very negative, depending on the quality of interaction afforded by the medium used. Most negative attitudes are based on technology difficulties and not content dissatisfaction (Ryan, 1991).

Adult learners in the coming decade will be turning to telecommunication methodologies in higher education and in their personal lives. This projection is supported by the astoundingly rapid growth of the commercial video industry and the smaller, but parallel, growth in the educational segment of that market. The use of video and computer-based instruction is documented in a survey of students at four universities (Davis, 1990). Ninety-two percent of the students responding reported access to a VCR, while 38 percent of the students said they currently used a VCR as part of their studies. Fifty-seven percent used a personal computer for their educational activities, and 45 percent used educational television. Certainly the student of 1990's is telecommunications literate, and the student of the next century will be telecommunications fluent.

The University of Oklahoma has a long history of providing distance education through many methodologies: over 100 years of extension courses, 78 years of correspondence courses, 30 years of interdisciplinary non-traditional Liberal Studies degree programming, 28 years of degree delivery on national and international military bases, 20 years of Talk Back Television course delivery, 8 years of telecourse/video course delivery, 4 years of satellite delivery, and 3 years of compressed video course delivery. One innovative technology-based project is jointly sponsored by OU, Middlesex Research Center, the Annenberg Foundation, the Kellogg Foundation, and the Oklahoma State Regents for Higher Education. Called OACIIS (Oklahoma Advanced Computer Interactive Independent Study), the project provides students with three courses that utilize video, computer, and electronic mailbox, in interactive experiences.

Across the nation, many total or partial degrees are offered to placebound students through telecommunications technology. For example, the University is a member of a nine-university consortium (University of Oklahoma, Kansas State University, University of New Orleans, University of South Carolina, Oklahoma State University, University of Maryland, Utah State, Colorado State, and Washington State) called the National Universities Degree Consortium, developed in 1990 to provide whole degrees and courses to students via satellite and cable TV. The first degree program initiated, a Bachelor of Management, will be offered through the University of Maryland in the fall of 1992. Other degree plans will follow.

The OU Graduate Program in Library and Information Studies

The master's program of the School of Library and Information Studies is one of only 59 accredited by the American Library Association in the United States and Canada; it is the only accredited program in the state of Oklahoma and three contiguous states: Arkansas, New Mexico, and Colorado. Considered the terminal degree for information professionals, the School's masters degree, the Masters of Library and Information Studies, is a 36 hour program of 6 required courses and 6 elective courses. Specialization within the course of study allows students to specialize in one of four traditional institutional settings (academic, public, school, and special librarianship) or according to function (technical or public services) or other more specialized work that reflects unique faculty expertise or materials collections--special collections and rare book librarianship, archives and records management, etc.

Embracing both the traditions of the culture of print and the newer electronic information technologies, the School's programs are very resource intensive, requiring that its students have access to extensive research collections and a large number of relatively expensive online and ondisc retrieval systems, as well as both standard and special purpose microcomputer software.

University Center at Tulsa--UCT

A unique higher education center has been developed by the state's higher education system to serve urban Tulsa students. The University Center at Tulsa is a consortium effort of four publicly-funded state universities offering upper division and graduate degree programs in the urban setting of Tulsa, the state's second largest metropolitan area. The consortium was developed 9 years ago and has tripled in size over that period. The average UCT student takes 5 credit hours per semester at night or on weekends, is employed full time, is 37 years old, female, and has children.

The Tulsa graduate students of the School of Library and Information Studies are typical of UCT students: they are older (35 years old), married, and employed. They number approximately 100, out of the total of 240 students in the School's graduate program. Since most of the Library School's students are more place-bound than traditional campus-resident students, the School, since 1981, has attempted to offer its program not only on its Norman campus (located in the state's largest metropolitan area--Oklahoma City) but in Tulsa as well.

Program Constraints and Problems

The development of technology-based methodology in the Tulsa program has been stimulated by many motives, including the more effective use of limited resources. Since the downturn of the state's economy during the middle 1980's, and its necessary consequences for publicly funded higher education in the state, it has not been reasonable to expect that a small professional program at a state university should realistically expect significant new faculty resources to meet an expanding statewide mission. However, the School's forward-looking faculty believed that more efficient and effective use of its limited resources could be made for the state if technological solutions were considered.

Three applications have affected the constraints of distance and time in both the delivery of our curriculum and in our advising and counseling functions: interactive television, modem-based communication and information services, and, soon, voice-mail messaging.

The Instructional Technologies

Interactive Television - Compressed Video

One of the means of delivering its program to a statewide audience that has been available for use since the 1970's is the Oklahoma Higher Education Regents Talkback Television System, a full motion system of one-way video and two-way audio that blankets the state's publicly funded institutions of vocational and higher education and larger public libraries as well--38 receiving sites. The School's faculty, however, had rejected this system for two reasons: one, as a resource intensive program, masters courses could not appropriately be taught wherever the television signal could be received; two, the School's faculty was interested in delivering graduate level instruction with as much student/faculty interaction as possible.

Instead, in the Fall of 89-90, the School began using the University's newly acquired compressed video system to simultaneously deliver the three required courses it teaches each semester to both a section in Norman and a second section in Tulsa. Compressed video is a two-way, interactive television technology that requires a microprocessor at each site to sample the local camera images to be transmitted, determine what parts of the image have changed since the last sampling, and send only that which differs--it thereby "compresses" the original full-motion input and requires much less channel capacity to transmit to the other end. Further, it is a reversible technology: classrooms at both ends are equipped with multiple cameras and monitors which allow complete visual and audio interaction.

As a means of systematically delivering the masters program's 6 required courses, the average of three courses taught each semester (Fall, Spring, and Summer) on compressed video have Tulsa enrollments that are approximately as large as the Norman enrollments (20 per class in Norman, and 17 in Tulsa). To insure effective onsite instruction, the School has paired an instructional facilitator (a locally available practitioner who possesses the masters degree and has experience in the content of the course) with the instructor of each televised course. However, because the technology is reversible, and the School's graduate courses are always taught in a once-a-week format, the instructor's do travel to the Tulsa site (2.5 hours each way) to deliver class from that end approximately one-third of the time, or 5 trips per semester.

Our experience to date has been mixed about the use of this video technology. On the positive side are several features. One, the current arrangement saves 10 days of research time each semester for the faculty who are using it. Two, and unexpectedly, we early on discovered that the system could be used for one-on-one advising during registration periods, allowing a Tulsa student to talk to her own faculty advisor.

On the negative side has been problems caused by the steep learning curve of this technically opaque system. First, unsatisfactory microphoning has forced student-to-teacher and student-to-student audio interaction to be either minimal or artificial and contrived for the class sizes we have: lecturing is facilitated, the unincumbered free flowing interaction of graduate education is not. Secondly, because of the technical difficulties that had to be solved "on the fly", our students have lived through some very rough sessions. As a result, they perceive, generally, that they are getting less for their money, even though we have evidence to the contrary (Dillon, Haynes, and Price, 1990).

Modem-Based Communication Services

The communication that takes place between a student and an instructor before, during, and after class is only a small portion of the interaction that is necessary to foster the student's development and successful completion of a program. Supporting this idea, the Library School in the middle 1980's developed and ran its own electronic bulletin board, first just in the Norman-Oklahoma City area, then in the Tulsa area as well, and finally over the whole of the state.

The School's current statewide bulletin board and messaging system is run on a 386-class, 24 megahertz MS-DOS microcomputer with 90 megabytes of hard disk storage and 5 megabytes of RAM. At present it uses shareware bulletin board software (RBBS) and runs 6 simultaneous 2400 baud nodes through DeskView, a multi-tasking environment. Connected to Southwestern Bell's x.25 packet-switching network, the bulletin board is subsidized by the Library School to allow free connection to the program's students (and other interested information professionals) from approximately 20 different locations in Oklahoma.

The main purpose of the modem-based communication system is the interaction of the students with their faculty and with one another. Faculty have used the bulletin board as a repository of assignments and feedback, for example. Other services offered by the School include private and public electronic mail and topical conferencing: a conference for statewide continuing education announcements; online retrieval concerns; information services for the state's large number of American Indian tribes, for state public libraries, state library agencies, and others. Conferences are established as requested by users.

Public domain and shareware software is available for downloading on a small scale, as well as 2,100 "floppies" made available in the PC-SIG CD-ROM Library and the addition of a Hitachi CD-ROM drive to the School's bulletin board hardware system. Also, for several years the School has maintained a database of new books for children and young adults that is used by state school media specialists for purposes of book selection. Just this year arrangements were made to add the University Library's online catalog to the statewide system, bringing access to that important research collection much closer to the School's homes and work--all over the state.

Looking into the Future

The future promises dramatic change and a variety of options in higher education through telecommunications and technology. Currently, several different options exist for obtaining degrees totally or primarily through technology. Specific to the School of Library and Information Studies at the University of Oklahoma is the fact that resource intensive courses must be delivered only to sites which have adequate library and information technologies available. The probability is high that during this decade, technology-based library and information science courses will be delivered only between Norman and Tulsa campuses. However, we also believe that in the near future students who have access to a computer and a modem will have access to larger and larger portions of information resources. When that happens, more and more graduate content, possibly including library resource-intensive courses, may be accessible more directly at the student's home or place of work.

In the nearer future, we are currently testing a relatively inexpensive voice-mail card that installs into any standard AT class MS-DOS microcomputer. Allowing approximately one hour of voice storage per 10 megabytes of hard disk storage, the system may be connected to up to 6 standard phone lines (we are using two lines). Separate from the School's four line key phone system, the voice-mail system will be controlled by the School's receptionist and office staff during regular hours of operation. At 5:00 pm, and on weekends, the School's key phone lines will be programmed to ring the voice-mail system. If the experiment is successful, the School will purchase an instate 800 service, allowing its students, no matter their location in the state, the ability to leave voice messages to their advisors, their instructors, or the School's administration.

Perhaps the future holds a change in the traditional image the ivory tower; perhaps the tower will sprout a satellite dish on its roof. In any event, it is clear that the future holds more technological options for easier access by our students. We at the University of Oklahoma are pleased to continue to be a part of this creative use of telecommunications to continue to serve an ever increasing variety of students.

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THE ELECTRONIC COLLOQUIUM:
A NEW MODEL FOR NONTRADITIONAL EDUCATION

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Abstract

Nontraditional programs have experienced great success in meeting the educational needs of off-campus adults. They have been less successful, however, in re-creating many of the extracurricular strengths of campus-based higher education such as lecture series, cultural events, symposia. SUNY-Empire State College uses computer conferencing for instructional purposes and seeks to demonstrate other ways of using electronic communications media to extend the campus to off-campus adults. SUNY-ESC plans to conduct an interdisciplinary electronic colloquium series titled"The New Ethics of Computer-Mediated Communication" which will be open to the "public." Each colloquium will feature a "lecture" by a nationally recognized scholar or practitioner, who will then lead a "discussion" drawn from his or her presentation. By using the medium to discuss the medium, participants will experience the ethical dilemmas which are the subject of the colloquium. This paper discusses how an electronic colloquium is conducted as well as some of the ethical concerns of virtual communities. By linking this technology with nontraditional education, remaining barriers to learning--physical capacity, work and family commitments, distance--are eliminated, and access to scholars,resources and peers becomes universal.

Introduction

Nontraditional programs have experienced great success in meeting the educational needs of off-campus adults, higher education's "New Majority." Independent study and external degree programs are now recognized as an indispensable part of American higher education. By taking advantage of creative delivery methods such as correspondence study, contract learning, television, audio cassette tapes, computer-assisted and computer-mediated

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learning,off-campus students are able to complete college degrees at times and places convenient to them. This paper will focus on innovative applications of computer-mediated learning at SUNY-Empire State College.

Perhaps the most significant change that computers bring to higher education is the freeing of learning from its historical constraints of time and space. We tend to view the computer as a technological thing and, therefore, think that its educational applications must be technologically exotic. If we view the computer as a place where students and teachers can get together to learn, it can assume the same educational role as the classroom, studio, lecture hall or laboratory: a pedagogical stage on which the set (chalkboard or graphics) merely supports the instructor, the students and the content of the activity.

The advent and expansion of computer-mediated communications have contributed to the development of new forms of human interaction--what may be called "virtual communities." By eliminating spatial and temporal barriers between people and between people and institutions, virtual communities expand access to higher education and enhance the quality of off-campus programs. At the same time, these new uses of technology raise questions about the conduct of human interaction when people do not encounter one another face-to-face.

SUNY-Empire State College:
A Virtual Community in Higher Education

SUNY-Empire State College is a unique and exciting institution--a "university without walls" enrolling more than 10,000 adult students throughout New York State each year. A comprehensive College of Arts and Sciences within the State University of New York, Empire State is the largest and most successful free-standing non-traditional college for adults in the United States. For twenty years, SUNY-ESC has served students who need an alternative to the classroom attendance and residential life found at traditional colleges and universities by enabling them to complete a college degree without leaving their homes or places of employment. SUNY Empire State College has demonstrated that it is not necessary to have a campus in order to have a college, that a high quality education can be provided by networking people to people and people to resources.

Students at SUNY-ESC are highly motivated, mature adults who are capable of working independently. They range in age from 18 to 80 with an average age of 37. More than half are women and about two thirds are married. Since its founding SUNY-ESC has graduated more than 17,000 students.

Because SUNY-ESC enables students to combine collegiate study with work, the overwhelming majority are working adults; 87% have full-time jobs. Already employed in business, industry, government and labor when they come to the College, 85% remain in New York State following graduation, reinvesting their knowledge and skills in the local community. More than half of all SUNY-ESC graduates go on to graduate school.

Uses of Computer Conferencing at SUNY-ESC

For the past five years, SUNY-Empire State College has been successfully using computer mediated communications (e.g., electronic mail and computer conferencing) for instructional and administrative purposes.

A computer conference enables people to interact at times and places that are personally convenient. Each computer conference has an "organizer" who leads the conference by posting "items" (or by asking others to post such items) to which the participants respond. The technology required is relatively simple. The "host"is a central computer equipped with conferencing software;SUNY-ESC uses a VAX 11/750 running Camber Roth's Caucus. Conference participants must have access to a microcomputer equipped with a modem and communications software. By making a standard telephone call, one can "dial in" to the host computer system at any hour of the day or night.

Open vs. Closed Computer Conferences

Computer conferences may be "open" or "closed." Open conferences are accessible to all users of the central computer system; closed conferences are restricted to those authorized to do so by the conference organizer. At SUNY-ESC, most conferences are open; those that are closed include credit-bearing electronic seminars in progress and discussions of various kinds of groups who wish to conduct their business without interruption.

Types of Computer Conferences

Currently, computer conferences at SUNY-ESC are used for four general purposes: to conduct credit-bearing instructional activities; to carry on college business; to promote peer interaction among students; and to facilitate discussions of special interest groups.

- Instructional Activities: SUNY-ESC has offered electronically-based courses in such diverse areas as artificial intelligence, constitutional law, English composition, economics,psychology, history, literature, and communications. Courses are conducted by an instructor posting a series of items to which the students post responses. The responses frequently assume the characteristics of discussion and debate, exhibiting the give and take of a good classroom seminar, even though class members have never "met" in person. Electronic seminars give students a chance to interact with peers, to test their ideas in a scholarly community.

- College Business: The College Senate supplements its face-to-face meetings with computer mediated discussion. Administrative groups(e.g., academic deans) and faculty committees collaborate electronically. As part of the College's effort to address academic skills issues, for example, a faculty sub-committee used conferencing to write a position paper on "Numerical Literacy,"exchanging drafts and soliciting comments electronically.

- Student Support: While external degree programs offer the flexibility needed by working adults to balance college attendance with home and work responsibilities, off-campus students who rarely see one another sometimes experience feelings of isolation and loneliness. Computer-mediated communication offers students the opportunity to have informal contact with one another. At SUNY-ESC, students have created their own conferences to share the experience of returning to college at mid-life ("Students" and"Parenting") and to discuss current events in a kind of electronic student union ("Controversy").

- Special Interest Groups: Examples of ongoing conferences that have been formed around special interests include discussions among faculty with similar academic interests ("Human Development"and "Business, Management and Economics"); computer support groups that are informally created or centrally managed; a conference of creative writers, both students and faculty, who exchange works in progress; and a conference on the challenges facing the disabled.

Computer-Mediated Extracurricular Activities

As we continue to develop academic and administrative applications of this technology, we seek, at the same time, to demonstrate other ways of using electronic communications media to extend the campus to adults who do not have time to come to campus. Can we replicate the extracurricular strengths of campus-based higher education as successfully as we have created its curricular strengths for off-campus learners?

A Public Lectureship Program:
The New Ethics of Computer-Mediated Communication

SUNY-Empire State College plans to produce an electronic colloquium series titled "The New Ethics of Computer-Mediated Communication." Each colloquium will focus on a specific ethical issue important to virtual communities. Each will feature a"lecture" by an important scholar or practitioner, who will then lead a "discussion" drawn from his or her presentation. Thus, we will not only address ethics and computer-mediated communication,we will use the medium as the vehicle by which we conduct our inquiry.

Ethical Questions

The advent and expansion of computer-mediated communications have raised ethical questions that strain the standards developed to govern human interaction in traditional communities where people generally encounter one another face-to-face. For example,ethical rules governing the ownership of ideas, or intellectual property, are generally clear in traditional community, ranging along a continuum of acknowledged ownership of formally written ideas to acknowledged availability of informally spoken ideas. Ownership and availability are not so clear, however, when such ideas are communicated on a computer screen.

Computer-mediated communication systems are creating "virtual communities" throughout the United States. Educational institutions, corporations, non-profit associations, government agencies are among the many kinds of organizations who are using this medium to allow widely dispersed individuals to communicate with one another. The rapid growth of computer-mediated communications raises new legal and ethical problems and may be, as Linda Garcia has noted, "symptoms of an underlying structural change taking place in society."

The Electronic Lectureship Program

Empire State has invited four nationally recognized authorities on the subject of ethics and electronic communications to present electronic lectures using our computer conferencing system. Selected because they are noted authorities on the subject, the lecturers represent diverse points of view and perspectives--law, government and academe. While all four presenters are prolific writers and speakers on the topic, several have had either limited or no prior participation in electronic colloquia--i.e., they have not had the opportunity to "practice what they preach." The presenters are:

D. Linda Garcia, Sr. Analyst, Office of Technology Assessment, United States Congress, and author of a monthly column "Washington Update" in the journal, The Computing Teacher.

Steven W. Gilbert, Vice President, EDUCOM, and co-author of a recent position paper "A Bill of Rights for the Electronic Citizen," which examines principles of intellectual property rights in the electronic environment.

Nicholas Johnson, Professor of Law, University of Iowa, and former Chair, U. S. Federal Communications Commission.

Charles R. Nesson, Professor of Law, Harvard University, and a moderator of the Annenberg/CPB television seminars Ethics in America and The Constitution: That Delicate Balance.

Conduct of the Colloquia

Each speaker's presentation will be made available to the participants on the SUNY-ESC conferencing system about two weeks before discussion opens. The presentation may take any of several forms--e.g., original lecture, previously published article, or case study--depending on the preference of the speaker. Over a period of time appropriate to the topic and presentation, the speaker will guide and moderate a discussion of the ethical issue(s) s/he has raised.

The colloquia will be available without charge to anyone in New York State by dial-in modem access. Because SUNY-ESC's computer system is available twenty-four hours a day and because participation is asynchronous, the schedule provides maximum flexibility for public participation. Those with access to microcomputers in their homes and offices may participate from either place. In addition, all of SUNY-ESC's students have access to a properly equipped microcomputer system at each of the College's 40 locations.

Each colloquium will run for a period of approximately two months, two weeks for participant review of the lecture and six weeks for participant discussion. Management of the conference and technical support will be handled by Empire State College faculty and staff. The lecture series will take place during the 1991-92 academic year.

The lecture program will discuss both the technology of electronic media as well as the ethics of its use. By using the medium to discuss the medium, participation will exist within the technology and participants will experience the ethical dilemmas which are the subject of the colloquium. Thus, participation will not be passive or abstract but will represent a town meeting of a virtual community with the diversity and multiplicity of points of view that define all communities.

Issues To Be Considered

The following issues will be addressed by the four colloquia:

- Ownership of Ideas: How does one demonstrate authorship within adynamic, digital medium? If information is "unfixed"--i.e., in a permanent state of flux, how do we protect the rights of authors?

What obligation do we have to credit what we learn in electronic discussions?

- Truthtelling and Honesty: Does the anonymity of computer mediation promote or discourage truth and honest representation of self? Since computer mediation is a hybrid of oral and written communication, are the rules of truthtelling and honesty different in real and virtual environments?

- Access and Community: Since relatively few of the general population have access, does computer conferencing threaten free association and political and social community? Does computer mediation isolate those who participate, heightening individualism at the expense of community?

- Community and Accountability: What obligations do participants have to each other, to their ideas and feelings, to standards of discourse? To what extent may participation be self-serving; to what extent must it serve the interests of the virtual community?To what extent may conference moderators censor participants?

The Intended Audience

The College plans to involve both an internal and an external audience in the colloquia. Within the SUNY-Empire State College community, we expect participation from students, faculty and alumni. Externally, we intend to target the educational community,the legal community, the communications industry, and the hightech corporate community throughout New York State.

Conclusion

A 1988 College study of student interest in and access to educational technologies revealed broad access to the requisite hardware. Responding to a question which asked if they owned or had access to equipment that they could use for study, 94% of the students replied yes for audio cassette player, 90% for videocassette player, and 61% for a computer.

Access to modems, at 17%, was the only potential concern. Since that survey, SUNY-ESC's regional sites have been equipped with computers and modems available to students. To encourage student involvement in computer-mediated communication, the College has also initiated a modem loan program. In addition, over twice the number of students who said they had a modem indicated they would take a course, if appropriate to their studies or interests, that required a modem. This finding argues that students will secure modems, as they secure texts, when it is in their educational interest to do so.

SUNY-Empire State College has an established record of extending access to higher education to adult learners and has pioneered in using computer conferencing for instructional purposes. Having tested and validated this electronic delivery model, we now wish to provide access to extra- curricular activities as well. The electronic colloquium series will be an important first step.

NONTRADITIONAL APPROACHES TO TEACHING, READING, AND WRITING

R_2T_2

James Hope Glennon Hietter

Take two of the three r's, mix in a pair of t's, and the results can be dynamitic. That's what happened at the University of New Orleans when a Title III grant allowed the English department to experiment with combining a three-hour basic writing class and a three-hour basic reading class into a six-hour course taught by a team of two instructors: a writing teacher and a reading teacher. The outcome of the project was synergy raised to a new power.

Germ and Genesis

As an open-admissions state university, we had to face the fact that many of our entering students, especially those prepared by the Orleans Parish public schools, were not ready to do college-credit composition. After setting up a basic writing program, we soon learned that these students had problems with writing because, to a great extent, they had problems with reading. How could people who were unfamiliar with the shapes, sounds, and meanings of words use these words in an accurate way to communicate their ideas in written communication? These were people who, for the most part, had read only what they had to read for school assignments, job-related tasks, and other crucial living functions; they did not read for pleasure, information, nor mind enrichment. For them the written language was, if not an enemy, no more than a neutral, pleasureless necessity. Consequently, the next step for us was the addition of reading improvement courses. Little by little we eventually arrived at the idea of combining reading and writing into one course since they are two aspects of one discipline: the written language, from one perspective as sender and from another perspective as receiver.

There was, however, a slight obstacle to achieving this goal. While we had three reading teachers and a plethora of composition teachers, we had not one faculty member who could teach both. The answer had to be to train each to teach the other's discipline, and this could be managed through team teaching. Of course our resources were too limited to embark on such a venture. Serendipity to the rescue, we sought and received a Title III grant that enabled us to start our program. The federal financing allowed us to credit and pay each instructor for six hours even

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though both were teaching the same class at the same time. Our goal was twofold: to train reading/writing instructors and to make the learning process more effective by combining reading and writing. Of course we wanted to prolong this piece of federal paradise as long as possible, but when the manna ceased to descend, we would have fourteen instructors who could teach a combined reading/writing class. R_2T_2 would evolve into R_2T_1.

Praxis

In our first semester of instruction, we began with three sections, which corresponded to our number of reading teachers. We chose the three composition teachers who seemed to have the most interest and promise. (The idea of team teaching was not that appealing to many professors who had long experienced their own autonomy in the classroom.) Choosing the students was a bit more complicated. All students who scored fifteen or less on the English component of the ACT had to take basic writing. Those whose reading comprehension on the Nelson-Denny test was eleventh grade or less were strongly urged to take Reading Improvement; however, the course was not mandatory. On the one hand, it seemed logical to choose the weakest students for our experiment; on the other hand, it seemed more sensible to select the better of the basic students, those who showed more promise of taking advantage of this opportunity to get a solid foundation and thus survive in the university. We felt that it was a privilege for the students as well as for the teachers to offer this combined course. We were thinking retention; we were thinking triage. So we began with the intention of placing in our program those students whose English ACT scores ranged between ten and fifteen, but our ambitions were quickly shattered as we met opposition from counselors as well as students who thought that we were punishing the more qualified students by forcing them to take a six-hour course when people who had lower scores only had to take a three-hour course. We compromised, of course, and the average ACT score for our first semester was 8.7 as opposed to an average of 10.1 for classes in which basic writing was taught by itself. A similar ratio existed throughout the five semesters of our grant: 9.3 English ACT for Title III combined reading/writing students and 10.8 for those studying writing separately.

As part of the grant stipulation, all of the participants in the project met on a regular basis to discuss the theoretical aspects and practical implications of teaching reading, teaching writing, teaching them together, and team teaching. We met on an average of one hour a week, sometimes for two hours every other week, often for an hour each week. The meetings were well attended and frequently ran overtime.

Each year the director invited an expert in the field of basic reading and writing to visit, observe, discuss, and evaluate the program. Dr. Michael Moore of Georgia Southern College was the consultant for the first two years, and Dr. Lynn Troyka of City University of New York was the visiting expert for the final year of the grant. In addition, each gave a major presentation open to the academic community and penned a detailed critique of the program's strengths and weaknesses with invaluable suggestions for improvements.

Pass Rates

Both teachers and students were highly enthusiastic about the program. The student evaluations consistently applauded the merits of having two teachers working together. They appreciated the interplay of the instructors and the increased attention and time they received. While they were less sensitive to values of the courses' being combined (some complained about the length of the class), the results were very satisfying, and these satisfied students spread the word to other students that this was *the* class to enroll in if they wanted to get a strong foundation for their college career. But the results speak the loudest. From the very beginning we took students with lower ACT scores and achieved a higher pass rate. And this continued throughout each semester of the grant so that at the end of five semesters the Title III students had passed at a rate ten percent higher than those who had taken the writing only course, even though the latter group had a 1.5 higher English ACT average; and these statistics derive from a study involving close to 3000 subjects.

Table I: Comparison of Pass Rates
of Developmental Students

Term	Title III Students		Non-Title III Students	
Semester 1	44.9	(31/69)	39.2	(208/530)
Semester 2	59.6	(59/99)	41.7	(256/614)
Semester 3	44.9	(40/89)	39.4	(190/482)
Semester 4	63.2	(55/87)	49.6	(226/456)
Semester 5	46.3	(38/82)	41.6	(149/358)
Totals	52.3	(223/426)	42.2	(1029/2440)

Table I should make the comparison more graphic; it compares the numbers and pass-rate percentage of those students who studied in the Title III combined reading/writing program with the figures of all other basic writing students. Passing these courses was determined by a department administered proficiency exam that was graded by a board and not by the student's own teacher.

Retention and Tracking

Studies by Norrie Townsend, guru and statistician of Developmental Education, revealed that in a one-year period regular basic students had a dropout rate almost twice as high as that of the RT students. The dropout rate for the students in our combined reading/writing experiment was 11.5%, whereas the rate for all other developmental students was 19%. During the same period, 55% of the Title III participants maintained a G.P.A. higher than 1.5 as compared to only 42% of the other developmental students.

Townsend's statistics were even more impressive when they focused on black students. Of these the dropout rate was more than double for the basic students who did not have the benefit of the combined reading/writing course. The Title III dropout was 8.8%, for all others in this group it was 19.5%. Also in this group the grade-point-average was significant. Of the 68 participants in the Title III project, 58.4% achieved a G.P.A. of 1.5 or higher during this one-year period as compared to 29.2% of the 123 students who took only the writing course.

Teacher Response

While team teaching threatened many instructors who were quite comfortable with their long developed independence in the classroom, those who were drawn to this new experience were able to broaden their scope and usefulness to the department. In some ways the combining of teachers lessened the work load, especially for composition teachers who had only one set of papers for six hours of teaching, but it also increased responsibility and added challenge for instructors who had to give up independent control and learn how to work harmoniously with another professor.

Each semester participating faculty wrote evaluations of their experience. Here are a few excerpts:

"I can't think of two better combinations in one classroom than team teaching and reading/writing. . . Dr. Samuel Johnson said, "I never talk to a man who writes more than he reads." Dr. Johnson would have very little to say to most of our students. . . Perhaps when reading becomes mandatory, as it is in Title III, students will have more of a chance for success in our remedial classes."

"We were especially pleased when we showed the students the movie of A Gathering of Old Men. They commented that the movie was boring compared to the book. This has to be a rarity in the television age."

"The most important way that I have benefited is that I have learned some very specific lessons on teaching reading that I plan to incorporate in my regular freshman composition classes. If all of the instructors who have participated in Title III have benefited as much as I have, the UNO English department has gained very much indeed from Title III."

"The overall result was the most noetically enjoyable remedial class I have ever taught--and second semester remedial classes at this institution are often a nightmare."

"In my professional opinion as a teacher and as a professional writer and avid reader, I believe that the best program I have had the privilege of working with for the educationally disadvantaged is the Title III program."

"To my knowledge, this is perhaps the only program on campus that involves its faculty in such frequent sessions (the weekly teachers' meetings) aimed at improving our instruction, our effectiveness with these students, and our overall professionalism."

"I personally have learned more in this classroom situation than from most graduate courses that I have taken."

"I support the tenets of the Title III program whether I am actively involved or not. For even if I'm not teaching in the program I will benefit from it by teaching the students who have been privileged to participate in it."

Denouement

Our original intent was to train fourteen instructors who would be able to teach a combined reading/writing class. However, we surpassed this expectation by preparing twenty teachers who can now offer such a class on their own.

Both of our outside consultants exhorted us to create a placement exam for entering students that would include an essay as well as a reading test. As a result, one of the last efforts of the Title III program was to design such a test. This exam has now been adopted by the university and is the official testing measure for placing all entering students in freshman English classes.

Our project has passed from germ and genesis through praxis to outcome, but the effects are still vital and vigorous in the minds of many members of the community that is the University of New Orleans.

A MYSTERIOUS PEDAGOGY:
AN EXPERIMENTAL MODEL FOR READING AND WRITING

Penelope K. Majeske

Abstract

The Weekend College Program at Wayne State University is an interdisciplinary degree-granting program for working adults in the metropolitan Detroit area. Students take courses in each of three divisions: Humanities, Social Science, and Science and Technology. The senior year curriculum, or Foundations of Knowledge, pulls together the interdisciplinary reading and writing experiences of the lower divisions.

Although there is more than one model for completion of the degree, all students take core requirements as well as university-wide general education requirements and thus have relatively little opportunity for non program related electives. Electives offered within the program are necessarily interdisciplinary (the program charter requires it).

In the 1990 summer session, I offered an upper division elective under a directed study format, "The Mystery Story as Social Commentary." I administered the *Nelson-Denny Reading Comprehension* test on the first and last night of class. Students read five novels, keeping reader-response journals and writing from four different perspectives on each book. One of the journal assignments was to be written after the class meeting in which the relevant book was discussed. A term paper was required.

This paper presents the results of pre and post testing, reflects on the virtues of journal keeping, and assesses the value of light reading in an academically rigorous interdisciplinary program.

General Education Requirements

Commencing in 1986 and having full effect in 1992, the Weekend College joined the rest of the university and most of the academic universe in the establishment of courses to fulfill general education requirements. Because the Weekend College is a general education program--albeit interdisciplinary--the revision of existing courses was an

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annoyance but not an adversity. New courses developed to meet new requirements did however tend to erode the available space in the curriculum for electives. Existing courses which had been revised now seemed bound to a predetermined standard of conformity which permitted little latitude for faculty.

One of the more interesting general education requirements was an intermediate writing course. The Weekend College already had in place a freshman writing course, and the senior essay certainly met the standards of the advanced writing requirement. While an intermediate course was a novel idea for us, the general consensus was that writing was heavily emphasized throughout our curriculum. Now it was a matter of formalizing that requirement, or turning a fact into a theory.

Writing Across the Curriculum

In 1989, the Weekend College Program set itself to an in-service training program incorporating the logic and pedagogy of writing across the curriculum. All faculty participated--some more equally than others--in surveys, colloquia, retreats, brainstorming sessions, and Friday afternoon meetings in which we groped at theory and grasped at method for infusing the entire curriculum with resolute, even zealous, writing assignments. The clearest evidence of the program's commitment was the hiring of a new faculty person whose first assignment was to organize and deploy writing across the curriculum.

A Mysterious Pedagogy

In the summer of 1990, largely in response to the sense of confinement and restraint imposed by the General Education requirements, I prepared a most casual light summer reading course in a directed study format, "The Mystery Story as Social Commentary." I was more influenced by the incursions of Writing Across the Curriculum than I had realized. Plausibly, I felt guilty looking forward to a "fun" course which would introduce few or no new great ideas. Too, I had become messianic with regard to the mystery novel--and bold and aggressive, as converts tend to be.

Thus I collared my new and willing colleague, expert in writing theory, leader of our Writing Across the Curriculum army, and told her I wanted to pre and post test reading levels to see what, exactly, would be accomplished in the course. We selected the *Nelson-Denny Reading Comprehension* test and on the first night of class I administered it to the assembled students (all suspicious of my motives, I might add).

In the course of my consultation, however, my colleague Mary Minnock also suggested I try a few techniques using journal writing emanating from reader-response theory. At her suggestion, I selected four response topics. Students were to write one page on each of three topics while reading the book, and write a fourth after the class discussion.

The three approaches to reading--that is, the journal topics--were:

1. Write one page of general reactions to the story

2. Write one page on the socioeconomic setting in which the story takes place. For example, what is the class and status of the various characters? Does their behavior reflect their status? And so on. Doubtless you will think of other things as you analyze from this point of view.

3. Write one page on one of the characters in the novel. Write as though you are the author (imitate the author's style, syntax, cadence, etc.). You may place the character in one of the author's scenes or invent your own. Be sure, however, that you imitate the author's style.

Once the book had been discussed in class, students were then asked to write a fourth one-page journal entry:

4. Write one page on what you think the author was really trying to get at. That is, what was the crime, what was the punishment? Was thepunishment suited to the crime? Who was the hero? Who was the victim? What is the author's message? What is the author's moral position on the events in the book?

My initial intent had been to teach a course on the mystery story as social commentary (I am of the persuasion that this variant of popular literature is the twentieth century's morality play.) And as I conceived the course and its readings there was an impressive cohesion and progression--all the way from Sir Arthur Conan Doyle to Elmore Leonard. That was not quite to be, however. Four of my original choices for reading were not available in paperback. What I finally was able to order can most kindly be called a pastiche. One selection of the original six just simply never arrived, and we settled therefore on a reading list of five books. They were read in this order:

Sir Arthur Conan Doyle, *The Sign of Four*
P. D. James, *A Taste for Death*
Elmore Leonard, *City Primeval*
Joseph Hansen, *Early Graves*
Eric Ambler, *A Coffin for Demerits*

The outcomes of this course were positive, persuading me that I can tell the whole truth and nothing but in describing it. The adult learners in my class in the summer of 1990 were not accustomed to leisure reading. Not one was an aficionado of the mystery, indeed the students seemed to hate most of the books. *The Sign of Four* had a certain level of acceptability--probably because most of them had read Sherlock Holmes in high school, had seen movies on television, and it was short, just ninety pages. They had no taste for P. D. James. That lovely story of the failure of Christian faith in the twentieth century left them cold. No, they loathed it (too long, too much description, maybe no pictures). *City Primeval* intrigued them in a way, but mostly because it was about Detroit. "Why should we read this," they asked. "We live it." But Leonard's bleak world view got next to them. I could tell they were starting to think out of channels.

Early Graves is a story about AIDS. The detective/hero, Dave Brandstetter, is a homosexual. I think Joseph Hansen's is an important writer and evidently the *New York Times* agrees with me. Nonetheless, I confess to some anxiety about what the response would be. Since at least part of the learning game is up/down, get the teacher, they liked it. The discussion was serious, analytical, and rational.

Eric Ambler's brilliant existentialist *A Coffin for Demetrios* knocked 'em dead. That class discussion was a dialogue, undulating, fevered, both text-specific and theoretical. I surmised that I had won. That was also the night I administered the *Nelson-Denny* for the second time.

The Results

The spring/summer term at Wayne State is a thirteen week affair. In the eighth week I gave students a list of possible topics for a final paper. Three of the four were conventional compare/contrast sorts of things, but the fourth gave students the option of writing their own mystery story.Generally, the course went well. Attendance was good, approaching one hundred percent (not typical for adults during the summer), discussions were strong, even contentious, and as nearly as I could tell everyone read everything.

Most, though not all students, were reading at the college level. The following chart indicates the changes that occurred in reading level between week one and week thirteen. The chart, it should be noted, indicates scores only for students who were present for both tests. It excludes students who took the second test (they had added the class after the first week).

Student	First Test	Second Test
1.	14.2	16.9
2.	13.7	16.9
3.	16.5	13.7
4.	10.1	15.1
5.	16.5	16.9
6.	13.1	14.7
7.	14.2	14.7
8.	11.8	11.5
9.	13.7	10.5
10.	7.3	11.0
11.	13.7	14.7
12.	14.7	16.9
Average	13.29	14.46

As the chart indicates, the overall class performance improved more than a full grade, but close examination indicates that the students with the lowest scores on the first test improved the most dramatically. Student number 4 moved from a tenth grade reading level to college sophomore/junior. Student number 10 moved from seventh grade to eleventh grade. For student number 3, I have no explanation--but student number 8 may speak for them both. She claimed she had begun to read more carefully, not just for facts.

While I consider the objective data persuasive, I was in fact more impressed by the topic selections for the term paper. Eight of twelve students chose to write a mystery story. Two of them were publishable. The other six were very good.

Student number 10, the fellow who started out reading at the seventh grade level, had significant writing problems at the beginning of the semester, though his oral skills were excellent. He was a strong if not dominant contributor to class discussions. My perception at the end of the term, based on his final paper, was that he was at the brink of a major breakthrough or improvement in his writing. It was frustrating to see him move on and be uncertain what, if anything, would happen. I was a little surprised to see him at a reception for graduating seniors at the end of the next semester. On that occasion he told me that after my class he had passed the English Proficiency Exam and was now graduating.

Conclusions

Reading levels improved for the students who took "The Mystery Story as Social Commentary." Perhaps the reading levels would have improved more impressively if the *Nelson-Denny* graded above 16.9. Many of the students were already reading at the college level, indeed only three were reading below.

There was no test for writing level available. My impressions, therefore, are just that: impressions. Those subjective perceptions, however, are informed by one student's spectacular improvement and by eight students' leap of faith into creating text.

The journal writing took them into the text as writers as well as readers. They literally wrote their own text at least once for each book, imitating the author's style, syntax, and cadence. Students had to "try on" five different writers, all thematically linked but highly accessible.

I taught the mystery story because I thought it would be fun. I was curious about the effect and therefore administered a reading test. Reading scores improved. More interesting yet, however, was the improvement in writing. Through the medium of journal keeping and the selection of accessible text, students forged the distance between themselves and the writer.

POINTS WITHIN THE HERMENEUTIC CIRCLE: AN INTERDISCIPLINARY FACULTY ARGUES ABOUT WRITING

Mary Frances Minock

In September 1989 I was hired in Wayne State University's Weekend College Program to teach composition and head a writing across the curriculum program. The Weekend College Program is an interdisciplinary studies program for working adults, and my 24 colleagues are a talented and vociferous lot, 80% of them who are regularly publishing, with degrees in subjects as diverse as genetics, biology, engineering, history, English, American studies, psychology, philosophy and anthropology. I was excited by the prospect of helping them develop shared philosophy and methods so they would become better teachers of writing.

After a year of intense planning, including asking all faculty to complete surveys of writing practices in courses along with their own writing processes and attitudes, with pilot projects and grant exploration, I started the implementation stage of our WAC program in Fall of 1990. The first step was a two-day weekend retreat at an inn forty miles away from our natural habitat in the office. I asked thirteen of my 24 colleagues to present writing-to-learn methods and perspectives I had determined through surveys and conversations would be instructive to colleagues. Though some of my colleagues were uncertain about whether they knew enough composition theory to present, they were able to see theoretical principles behind their assertions as we talked. Along with my own presentations we approached the weekend collectively, planning it with all of our divisions represented since talent for teaching writing, some of it intuitive, seemed distributed across the curriculum. Our retreat was punctuated by attention to both pedagogy and our own writing. I asked and got from all five-minute readings from imaginative and academic work, importing the "open-mike" ritual of poetry readings and other performance arts. We also scheduled times when we would eat together, swim together, and relax in the hot tub together. Many later indicated that we had started an important change in our usual dialogue: the conviviality, the listening to each other, the representation of many voices were and continue to be important signs that we are coming together to focus on an important shared mission: the improvement of our students and ourselves as writers.

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My paper analyzes the discourse of a particularly "lively," i.e. heated, discussion following a panel presentation of four colleagues entitled "Writing As Struggle," and then a short presentation by myself and a colleague on collaborative writing. As with the entire retreat program I designed the sessions so we would collectively offer a broad perspective on writing and the development of writing abilities. I was guided by my composition theory applied to the situation: along with "nuts and bolts" of assigning, responding to and grading writing, I would help all to understand the complexity of writing. We would explore our own theories and intuitive hunches, and perhaps we would position ourselves within a circle of attention authentic to ourselves, and yet compatible with positions of others inclined to attend to other dialectics. Together we would collaborate to make good theory. Guiding my efforts was another point of composition theory: attention to the community surrounding writing. Writing is a social act, and when we provide good audiences, good feedback about what has been written, good talk about writing, good reasons to write, we provide more inspiration than we do simply concentrating on writing itself. Among a particularly intelligent faculty, questioning, debating, thinking, and speculating would not upset the attention to WAC methods construed as pragmatic.

The debate we had during and after the "Writing As Struggle" session, not the only debate as we seem to like to argue, is significant, for it shows progress at the same time it shows our faculty shifting between interdisciplinary and disciplinary concerns. It supports in some measure the disciplinary pulls Julie Thompson Klein has noted in interdisciplinary conversations, since faculty incorporated their thoughts about their own writing conducted in traditional disciplines. Faculty had shared the day before their narrative reports from surveys about their attitudes and processes for writing, and not all of my colleagues considered writing "wrestling with the devil," as our first panelist, Ronald Aronson, a philosopher, described. I claim that some of the debate may be traced to disciplinary assertions emanating from the texts faculty habitually read and write. I claim also that some of the debate went further, showing us willing to think and synthesize several points within a hermeneutic circle, with a clear movement in the debate from part to whole and whole to part. Several of us, in fact, demonstrated our close listening to others by synthesizing points that had come before to dwell in the aura of the mystery of the writing proces. Our willingness to tolerate new circles within the hermeneutic certainly led to what Wolfgang Iser calls "consistency building," we "reading" or interpreting writing and writing pedagogy in ever expanding tolerance for new views. Our expanded notions of writing in dialogue with others has allowed us to move toward a more honest view for students, based on writing for different audiences for different purposes in different contexts. We think our collective theory provides better positioning than if we were all "doing the same thing."

The Debate

A brief summary of the presentations and discussion appears below. Since not everyone was perfectly audible on tape, and since the presentations and debate which followed ran more than an hour and a half, I have summarized from the transcript of the discussion to render the most salient points of colleagues. A fuller version of the transcript and an analysis discloses several other interesting features of our dialogue: most importantly, we are borrowing rhetorical terminology as we take the WAC message to heart, and that terminology is creating a common vocabulary with which to talk about writing. I have also abridged part of what was said in order to focus on the most debatable points in the presentations. Thus, of the panel of my four colleagues, I give more detail of Aronson's 20-minute presentation than I do of Guerin Montilus's presentation of roughly the same duration. Aronson's assertions caused more debate in this instance, while the assertions of Penelope Majeske and David Bowen met with relatively little resistance. In fact, references to Majeske and Bowen often serve as ties to remind us we are attempting to come to consensus. The structural analysis provided by Montilus would need to be amplified in subsequent meetings. With these caveats I have nonetheless set the debate in transcript format, identifying the original discipline of the faculty member in question, since these disciplines in several instances bear on my subsequent interpretation.

The Beginning

I introduce Ronald Aronson, a philosopher, on "Wrestling with the Devil."

Aronson maintains that writing is a moral struggle--as true for a scientist as it is for a poet, for a writer truly wrestles with forces of evil, fear, and diminishment, and writing is an expansion of the world. If this is true about writing, if we are asking our students to see this moral struggle, then it is worthwhile to show them the whole process. It is not worthwhile for any of us to dash off whatever is on the top of our head. Writing is a struggle; it's painful and it ought to be. It's not as though there are some unneurotic writers out there. We struggle with our own self concept, and we must forgive ourselves for how difficult it is. The process begins with pain, anger, a glimmer of hope. When it begins with pain and anger, we, like our students, are apt to say we have no insight. No matter how old we get we're still victimized by this image. The pain is what we should start with. If we understand it we are working on ourselves and the world simultaneously. Confusion is necessary.

Dialogue

Moti Nissani, a geneticist, responds that there are two kind of writers: those who struggle as Ron [Aronson] has said, and those who write for others, because exterior forces are also at work. For instance, encapsulated in the admonition to "publish or perish."

Aronson maintains that one must transcend this pressure, both for our students and for ourselves as writers. Yes, we do have to write, but we can turn it into something authentic. We wouldn't write well when we say, "Yes I have to write because I need a promotion." We must transcend this in order to enter into the struggle.

Sandor Agocs, an historian, maintains the second kind of writing may only start out of necessity. It is a process which starts snowballing.

Aronson questions what are the necessities. "Publish or perish" is really a structural way to say that those who have completed doctoral dissertations and have agreed to enter the academic life have agreed to live by publication. And even the alienated formulation of it, "publish or perish," contains at its core the "ideal".

Richard Raspa, a folklorist, interposes that we view this presentation as a seminar. The wrestling with the devil is really a sensational metaphor.

Aronson responds that the notion of empowerment also fits here for us and our students. We have to empower ourselves, and our students, and we need to know this. We must know that it does begin in pain. Students too must give clarity to confusion. The confusion is a necessary stage because subjective/objective reality is confused. We shouldn't diminish the confusion. All the pain involved is necessary. If you see the process that way then you see the process. You stop writing, get up and go somewhere, and the ideas are still there. "Do you ever wake up in the middle of the night and the ideas are still there?" The one thing we want to tell our students is that it takes time.

I introduce David Bowen's presentation: "Models of Teaching and Writing, or Mudwrestling with the Wetware"

Bowen, a physicist, explains his admittedly sexist title, first defining "mudwrestling" and then, from computer science, hardware, software and "wetware," or the brain. He presents a behavioral model and a cognitive model for explaining writing pedagogy. The behavioral model stops at the student's mind, and so we concern ourselves with providing information, and we don't look at what goes on inside. Our job is to bring everything to bear; we tell students what they are supposed to do, and the bottom line is whether students have been successful or failed. We specify what kind of behavior will earn them a grade. The cognitive view assumes there are processes going on in the mind, and our job is to know them; he briefly explains Piaget's developmental model. Also modern theories show left and right hemispheres lighting up during writing. [He shows us a complicated chart] "I should say this is a very simplified version." [Laughter] In the case of writing, the process is recursive: formulating the ideas, reformulating the ideas. One of the most productive ideas to observe the cognitive model is to ask students for elaboration, reformulating an idea, collaborating to do it, without prescribed behavior. Reformulations disclose the cognitive functioning of students.

I introduce Penelope Majeske, whose presentation is entitled, "What I Tell My Students When They Tell Me Their Grandmother Died, Again."

Majeske, an historian, opens with an anecdote about her 14-month-old granddaughter whose discourse community is made up of about six members. Her granddaughter likes to be read to, but will not talk unless she is off in a corner talking to herself. What she is doing is struggling with the discourse community to get control of speech without being challenged. Ron's [Aronson's] metaphor is precisely right, for every struggle which conquers evil also conquers self doubt. Initial resistance comes in a variety of forms in our students who must write senior essays. If I do not recognize myself that it is resistance, I cannot help. I deal with resistances in pretty much the same way as I deal with them in myself. Students come with past decisions that education at a prior time was not for them. Their decisions were different from those we made. By the time students write senior essays they have learned to overcome many of their resistances to writing, and yet the prospect of such a long text throws them back. She shares two procedures, among many, she has found to help: She asks students to take an anonymous paper and collaboratively correct it, and at the end she tells them it was hers; through trust the resistance is healed in the transference to herself as teacher. She also helps the class see others as collaborators in their struggle. A second level of resistance comes when students must give order to chaos. Students have spent three months immersed in gathering data. She warns them that it will come, and that seems to support them.

I introduce Guerin Montilus, whose presentation is entitled, "Reading and Writing: A Structuralist Approach."

Montilus, an anthropologist, maintains that writing implies reading. Reading implies methods and categories which filter down from rhetorical structures to linguistic structures to vocabulary. It is not so much what I say in class as what my students have discovered through reading. [He shows us books which he has recommended that have influenced his students.]

I, in the role of emcee, and seeing a storm of hands, remind all we must give people a chance to go to the rest rooms. I offer that Theodore Kotila and myself will abridge our presentations on collaborative writing to allow an open forum for response before lunch. I suggest: "If you do some writing, you can focus your responses. We'll need to talk. There's too much not to talk about." [We take a five minute break.]

I share my pleasure in seeing us dovetail on each other, and then move to my short presentation, "Collaborative Learning: What's Lost? Control. What's Gained? Community. It's very helpful as a support for students to assign collaborative projects, simulating professional writing or asking for various roles and personae. What is lost is teacher control. If you ask students to come up with a coauthored text, you may need to suspend your usual practices with grading. You may have faith that students will sort themselves out. If one goofs off, the others will help or even police the other. Collaborative projects help with the process of revision. Students are perfectly capable, sometimes just as capable as ourselves, of seeing problems in the texts of others. Students get close to each other. Theodore Kotila, an historian, shares two collaborative projects he developed to help students write about history. [I then open the floor for discussion of all presentations.]

The Debate

Martin Glaberman, a social historian, asserts a philosopher can say how he does his work, but it's not the way the real world works. In the school context very contradictory procedures can work. Students have a history and the history is the educational system. The only one who mentioned it was Penny [Majeske]. Every system in the process of socialization is about sustaining itself. One of the goals of education is elimination. How else do you get a million auto workers, a quarter million burger flippers, and a quarter million computer technicians? By telling them they cannot do anything else. By telling them how ignorant they are. By pretending that writing is some kind of special skill. By the time students come to your class they've learned you can't be trusted. Students learn that writing doesn't deal with content; it deals with form. Students don't trust us. Example: English teachers. The idea that you or I can overcome in one class twenty years of experience is totally utopian. My attitude is not Ron's [Aronson's] that writing is a moral struggle, my attitude is that anybody who can talk can write. It's hard work. If you can say it put it in a tape recorder and transcribe it. Academic writing obfuscates reality. Collaborative writing at least gets away from grading. It takes half a semester to get students' trust.

I applaud Glaberman bringing up the social context. I am glad we are talking about the system, and I'm glad Penny [Majeske] talked about resistances, because no self-respecting person will come through school without them. We must help students with their struggle.

Raspa reminds us that this is the same conversation we had yesterday. We're creating a community of scholars here. Reality shows up in language. What I do you can do. The invitation is to join the community. We're not eliminating people, we're inviting them to join the community.

Gloria House, a poet, asserts that one of the problems is we are putting ourselves at the center of the world that everyone needs to create. I think we shouldn't be. We're not inviting students into a community, we're asking students to learn to join any community they chose. We're instructor centered. That's become very clear to me in the last two days of listening.

Nissani expresses his wish to take up Glaberman's point. Students are coming with indoctrination--20 years, thirty years, 40 years of indoctrination. They have been reading the Christian Science Monitor. They are not philosophers sitting in Plato's cave. They have so many misconceptions about the past. We have to recognize the history. We have to realize it can't be done all at once. We can only plant seeds for gradual process.

Montilus asserts that Nissani's point about history is true. There is also a grade there.

Mary Lee Field, an English teacher, maintains the way to help is not by telling the truth about the social order; we must get students involved. WAC is a way for us to get each student to participate; whether they are sharing struggles, or resistances, or asking for help with particular textual problems. It must be this year, next year, and it never stops.

Fred Wacker, a sociologist and lawyer, addresses a bit of dialogue to Glaberman: "We got fundamental differences between us." I would like to see a narrower, more pragmatic focus; I am more interested in the quality of feedback; what do we expect? I want something pragmatic, that I can hold on to.

I remind Wacker that we will again come to the pragmatic in the afternoon.

Aronson rejects the anti-intellectual digs about philosophers. Resistances come from school; students must get assurances that they are taken seriously. Everyone, ourselves included, has a resistance to the natural process of getting clear. The process of confusion unless we come to expect it is hard to take. Everyone wants the answer at certain points. Whether we do it collaboratively, or one on one, we have to do it.

Andre Furtado, a mathematician, asks that we focus more on pragmatic concerns. One of the problems is the issue of growth. You can spell out behavior. If you behave this way, you get this grade. Students are at different levels. We need a settling time. A tutor. A place for people to get development time.

I remind Furtado that we are working on getting money for tutors for students who need them. But one thing I worry about is us talking about students as others, or as deficient. We are all deficient.

Agocs asserts that we should have our tape written up and published. There is a dialectic to this discussion. The theory coming out is excellent. Someone should sit down and write this out. Somebody should sit down, come up with a draft, have everybody look at it. But not me, I don't speak English.

All rise for lunch, laughing.

An Interpretation, Placing the Views in Context

Interpreting the lively discussions of my colleagues is a challenge and an opportunity to prove an important point about writing as opposed to speech. In the quiet of listening to a tape of this and other debates, transcribing them myself, and only through the medium of print, I may get the chance to elaborate on my own assertion, delivered in as vociferous a manner as anyone else, after the next debate of the retreat, that "Everyone is right. Everyone is right." Part of my interpretation is rendered in the spirit of the stairs: all who argued so eloquently with each other were right, and the movement of the debate shows clearly colleagues positioning themselves to take up more and more of the complexity of what is writing. These views may only be reconciled in a phenomenological approach, that approach allowing for a series of views and dialectics representing multiple looks at writing.

The model represented in Figure One: Text-Context, A Hermeneutic Model is a representation of my own device for explaining as simply as I can the nature of writing and the writing process. I have relied on the philosophy of Paul Ricoeur, who explains the energy in the hermeneutic circle simply enough: "You must understand in order to believe, but you must believe in order to understand" (45). What Ricoeur is after in interpretation theory is the dialectic of the two concepts. No interpreter can know what a text says unless she lives in the aura of the text to be interpreted. Yet we cannot believe unless we interpret to understand. The philosophy presents us with a continual series of positions, for each interpretation must be held against a reverence for what is still hidden. James Kinneavy extends the concept of Ricoeur to looking at the part to whole; thus meaning is constituted by looking at features in relationship to their surrounding context, and by looking at context in relationship to its parts (2). These ideas allow us to represent writing, that is, any text written or to be written, in a dialectic with many dialogues outside the text in context, including dialogues with audiences, assumed purposes, social and immediate contexts, genres of texts to be written, concepts of the self to be represented in the text, et cetera.

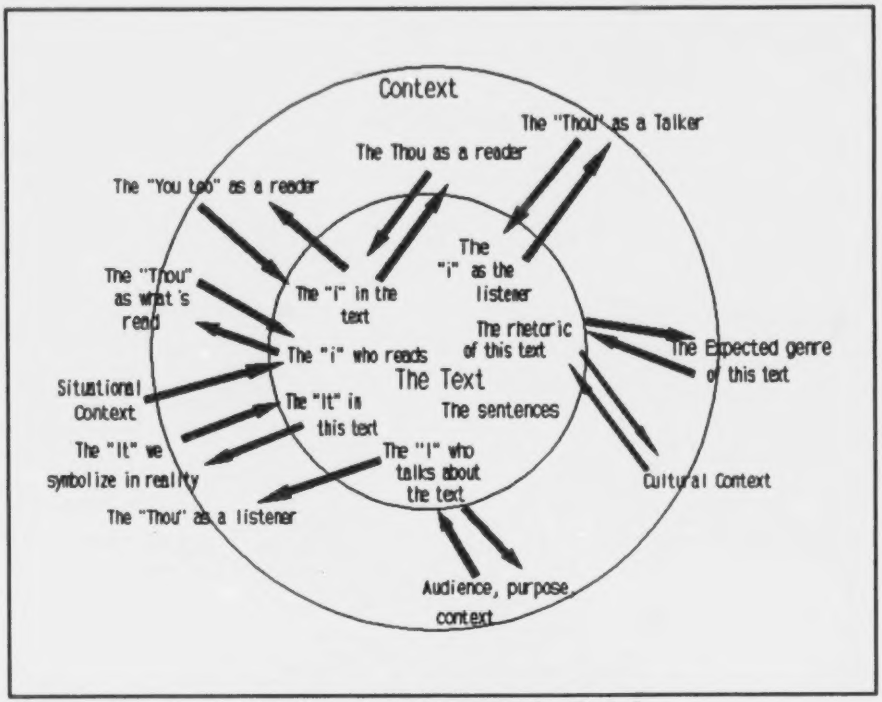
Context
The "Thou" as a Talker
The Thou as a reader
The "You too" as a reader
The "Thou" as what's read
The "i" as the listener
The "I" in the text
The rhetoric of this text
The Expected genre of this text
The "i" who reads
Situational Context
The Text
The "It" in this text
The sentences
The "It" we symbolize in reality
The "I" who talks about the text
Cultural Context
The "Thou" as a listener
Audience, purpose, context

Figure 1: Text-Context, a Hermeneutic Model

If we look at the debate I have rendered with this model we see an ultimate resolution, or at least a tolerance for allowing the debate to continue. For each exchange in the debate shows a dialectic of text and several features in context. This dialectic does, as Agocs points out, continue throughout the debate, dignifying the double arrows of my model. Aronson positions himself within the text, showing self struggling with the challenge of a text to be written, showing the opportunity to construct through the text an authentic adjustment of the context, or a vision of the world. Nissani positions himself in context, showing the pull of "inauthentic" or exterior forces to write. Agocs attempts to synthesize that dialectic by showing context (the necessity to write) providing the challenge for an authentic "snowballing". Raspa reinstates the value of Aronson's devil metaphor to draw us deeper into the personal struggle.

Bowen marks the boundary between what is contextual, i.e., observed behavior that may be guided by ourselves, and what is textual or cognitive, and can only be guided by a writer. Majeske explores how we in context may provide support for writers resistant to the struggle Aronson describes by showing in various ways we may be trusted since we also struggle. Montilus reminds us that dialogues with published reading, another contextual phenomenon, provide structural modeling to help writers ultimately overcome their textual struggles. I and Kotila remind all that we may provide a more supportive context for writing by extending the audience to include others besides the teacher, and by blurring the lines between personal authorship to allow the closest support. We attempt to pull others into the text who will support the struggle.

Glaberman explodes all dialogue which has come before by introducing the politics of the school context and the pull of different genres to be written: "A philosopher can say how he does his work." I attempt to synthesize Majeske's resistances with Glaberman's political context. Raspa attempts to synthesize Majeske's, and others', showing of ourselves as writers with Glaberman's political context. House affirms the right of students to choose their own context for writing.

Nissani reaffirms Glaberman's point and synthesizes it with Bowen's: we can only observe gradual changes in behavior. Montilus supports the point by raising the issue of grading. Field explodes Glaberman's point and reaffirms Raspa's, Majeske's, Aronson's, House's and my own: our task is to encourage involvement in the whole process.

Furtado reaffirms Nissani's point and attempts to synthesize it with Wacker's, while at the same time positioning himself with increased separation between ourselves as writers in context and students creating their own texts. I position myself to reaffirm Aronson's, Majeske's, and Raspa's points by attempting to diminish the separation between us and our students.

Agocs attempts to synthesize all points by pointing out the quality of our dialectical discussion.

The discussion was productive. For though it strained some of us hoping for a linear model and clear directions about what to do at each step as we teach student writers, we worked towards a more honest estimation of how we may help students with several recursive pulls between text and context which we know replicate the struggles of any writer attempting to make sense through creation of a text. The discussion was indeed influenced by our own writing in disciplines, and I hypothesize that some of the resistance to Aronson's "wrestling-with-the-devil" metaphor, as well as his assertions, emanated from writing faculty shared from questionnaires detailing their own attitudes and processes for writing. In them several faculty described their attitudes about writing in terms and metaphors close enough to Aronson's; for us we simply valued his honesty in exploring his own wrestle with the devil, which we recognized. For others, particularly those whose writing was directed towards members of discourse communities in the sciences and social sciences, Aronson's metaphor seemed strange: when the reality to be written about appears "out there" in context, do we struggle so much with our own demons, or do we organize material and "write it up"? This pull of genre led to several estimations of our struggles, and it led to various procedures for writing. House, a poet, whose writing relies perhaps the most on originality, would later claim that self could be factored and discovered without thinking of audience. Our positions were factored and influenced by our habitual reading and writing, and we are now able to explore these pulls towards different audiences and purposes, depending on the self we present through genre.

How May Such Discussions Be Generated Elsewhere?

The quality of discussions at our retreat was enhanced by two factors which readily may be transposed to other settings. Analysis of the discourse of our "lively" discussion shows, I hope, that underneath the debate was serious listening and serious attempts on practically everyone's part to incorporate and synthesize the contributions of colleagues to make our conversation move. As in most academic situations such conversation is not always achieved.

The first factor involved writing. Faculty were polled extensively the year before, and everyone had summarized his classroom practices with writing, his attitudes and processes for his own writing, and his views on students' difficulties in writing. The writing I asked for in planning the program insured: a) that all voices were represented, so that no one would have to compete with an outspoken colleague; and b) that we, as our students, were able to deepen our conversation by virtue of it coming after writing.

The second factor involved play and celebration. The context for our discussions, in a relatively swank hotel, and definitely out of the office, contributed much to our willingness to listen. I believe the sharing of our own work in a "performance" setting did the most to break down barriers to communication. By asking people to prepare a work to read we were calling attention to the power of words to change us. Several faculty commented on how little they had previously known of other colleagues' work; many were moved by both the imaginative and academic work of colleagues. Play supported listening.

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CONTINUING EDUCATION AND THE ADULT LEARNER

THE APPLICATION OF ADULT EDUCATION MODELS TO TRADITIONAL PROGRAMS

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Abstract

This paper provides the basis for an integration of adult education models with traditional educational programs by: (1) exploring the assumption on which adult education is based; (2) presenting data on the ability (Shipley Institute of Living Scale), the achievement (The Academic Profile), the learning style (Canfield Learning Styles Inventory) and the psychological need (Jackson Personality Inventory) of adult and traditional students; and (3) calling into question the assumption of adult education because there are not dramatic differences between adult and traditional learners.

Introduction

Two disparate educational delivery systems exist on many campuses that serve both traditional and adult students. These programs persist despite dramatic demographic changes that indicate the need for a more integrated model of undergraduate education. For example, 40% of the undergraduate population are adult learners (Fact File, 1989), the majority of which participate in traditional delivery environments (Anderson & Darkenwald, 1979). The choice for adult learners remains narrowly constrained to one of two options. They may participate in adult degree programs which are qualitatively unlike a traditional education. Such programs commonly utilize separate faculty, operate within distinct administrative units, apply different fee structures, provide flexible class scheduling, offer broader degree goals (e.g., multidisciplinary

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majors), and incorporate various teaching methods (e.g., self-directed study, independent projects, group-study). This option can be seen as innovative, empowering, and developmentally sensitive, or oppositely, it can be viewed as segregation of the adult student from the educational mainstream. The second option available to adult students is to join the mainstay of higher education and become invisible and silent members of the traditional undergraduate community; a role that disregards differences and raises important questions about the transactional relationship between adult students and the undergraduate institution (Kasworm, 1990).

The guiding assumption that justifies separate programs to educate adult learners is that there are differences between adult and traditional learners. These differences dictate the need for separate education, or at least this is what is most often implied (see for example, Kasworm, 1980 & 1990, Morstain & Smart, 1977). The authors of this paper agree with the general conclusion that there are of course differences between adult and traditional learners, but we disagree with what these differences mean for higher education. Specifically, we believe the differences between groups of learners (adult versus traditional) are less noteworthy than the differences within groups of adult and traditional learners. The study reported below examines some domains in which differences might be expected, e.g., ability, achievement, personality, and learning style.

Method

Sixty traditional learners (26 males and 34 females) were randomly selected from a total population sample of first-year, 18- to 20-year-old students admitted to Capital University in the Fall of 1990. Twenty-five adult learners (13 males and 12 females) were selected from Winter 1990 students admitted to the Columbus Center of the Capital University Adult Degree Program. All students were tested with the Shipley Institute of Living Scale (Zachary, 1986), the Jackson Personality Inventory (Jackson, 1976), the Learning Styles Inventory (Canfield, 1988), and the Academic Profile (Educational Testing Service, 1989).

Results

Shipley Institute of Living Scale (S.I.L.S.)

The S.I.L.S. is a test of general intellectual ability with subscores for vocabulary (general verbal ability and comprehension) and abstraction (logical reasoning and abstract thought). A T-test failed to detect a significant difference between adult and traditional learners on general intellectual ability. Both groups had a mean I.Q. of 108. Despite the sameness of general intellectual ability, adult learners, both males and females, showed significantly higher verbal quotients compared to traditional learners.

The Academic Profile

The Academic Profile is a norm-referenced test of academic proficiency. Academic area subscores are reported for humanities, social sciences and natural sciences. Criterion-referenced scores are reported for reading, writing, critical thinking and mathematics. There was not a significant difference between adult and traditional learners on the Academic Profile total score. Adult learners exhibited significantly higher scores on four subscores of the Academic Profile - humanities, natural science, reading, and writing. Within the adult learner sample, females had higher scores on mathematics. Within the traditional sample, females had lower scores on humanities, natural science, reading, and writing.

Learning Style Inventory

The Learning Style Inventory (L.S.I.) measures students' preferences for eight conditions of learning, four areas of interest and four modes of learning. Three out of the sixteen scales on the L.S.I. showed significant differences between adult and traditional learners. Adult learners showed higher scores on the peer scale and lower scores on the organization and detail scales. Thus, adult learners show a preference for maintaining good relations with other students and they have less need for specific information about assignments and clearly organized coursework. There were many differences between males and females within the adult sample. Females showed greater preferences on scales that assessed peer relations, language-based work, and people-related subject matter. Males showed greater preference for setting their own objectives, working with numbers and logic, and 'things' (rather than people or language). Not as many differences emerged within the traditional student sample, although males showed a similar preference for working with 'things' and females showed a preference for language-based work. The more telling comparisons may be those that compare groups while holding gender constant. Male adult learners, when contrasted with their traditional-age counterparts, show stronger preferences for peer involvement, but less for organization, detail, and inanimate subject matter. Female adult learners, when contrasted with their traditional-age counterparts, show less preference for organization, detail, and people.

A nine category learner typology can be generated from the L.S.I. A brief description of each type is listed below, the reader is then referred to the figure depicting the proportion of cases for each type:

Social - prefers extensive opportunities to interact with peers and instructors; small groups and teamwork are preferred.

Independent - prefers to work alone toward individual goals; analysis of case studies or self-selected and self-paced programs are the best match.

Applied - prefers to work in activities directly related to real-world experience; practicum, site visits, and team labs are the best match.

Conceptual - prefers to work with highly organized language-oriented materials; lectures and reading will create the best match.

Social/Applied - prefers to have opportunities to interact with students and instructors in activities closely approximating real-world experience; instruction involving role playing, group problem solving, and supervised practicum create the best match.

Social/Conceptual - prefers to have opportunities to interact with students and instructors using highly organized language-oriented materials; instruction involving a balance of lecture and discussion will create the closest match.

Independent/Applied - prefers to work alone toward individual goals in activities closely approximating real-world experience; individual labs or unsupervised technical practicum create the best match.

Independent/Conceptual - prefers to work alone toward individual goals with highly organized language-oriented materials; reading, literature searches, and reviews create the best match.

Neutral - no clear areas of strong preference.

Jackson Personality Inventory

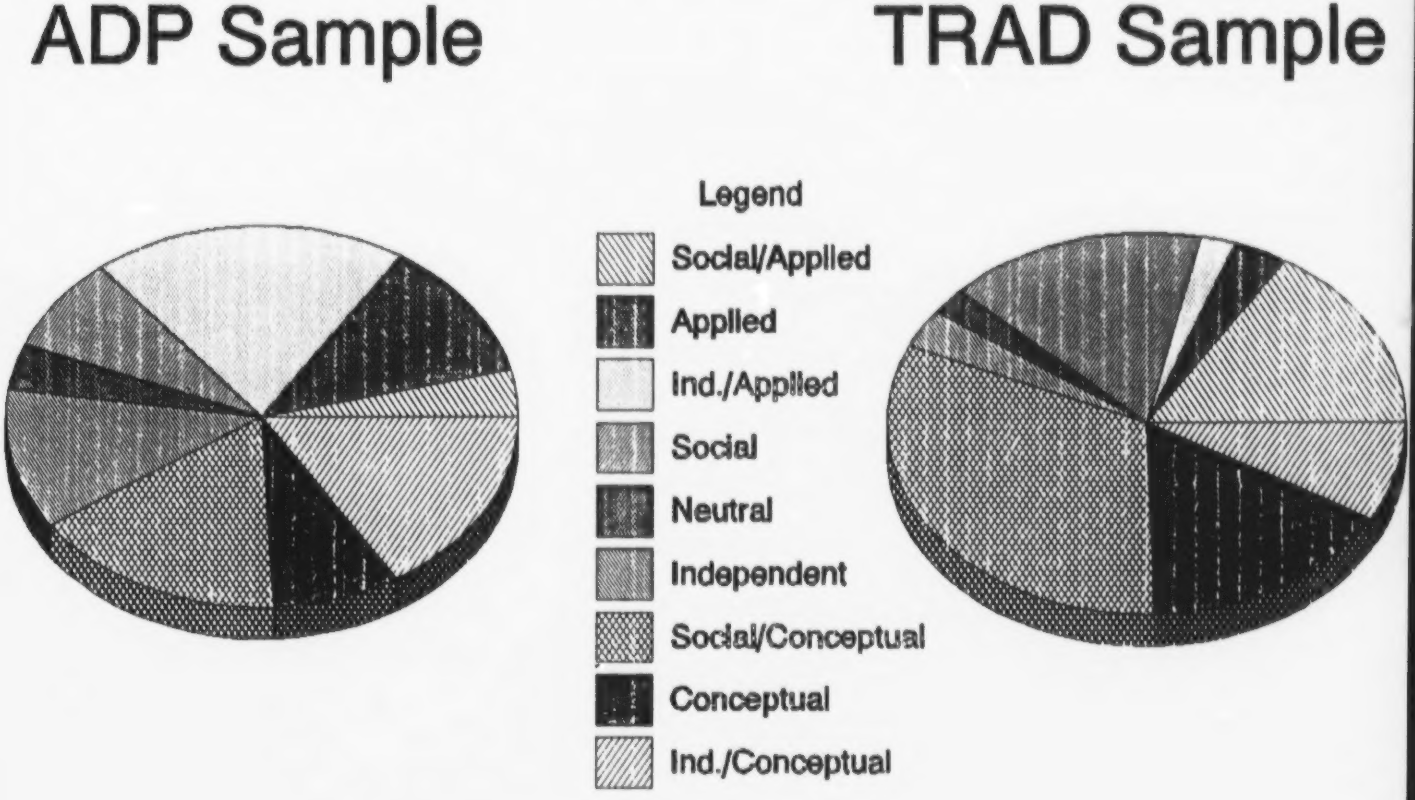
The Jackson Personality Inventory (J.P.I.) is comprised of 15 personality scales reflecting a variety of interpersonal, cognitive, and value orientations. Only four out of 15 scales showed significant differences between adult and traditional students. Adult learners had higher scores on value orthodoxy and responsibility and lower scores on social adroitness and social participation. Thus, the adult students seems to value traditional customs and beliefs and they have a strong and inflexible conscience, whereas traditional-age students are more socially adroit and they prefer to engage in a variety of social activities. Within adult learners, females score higher on risk taking than males. This gender difference was also true within the group of traditional learners, plus females here showed greater anxiety, greater energy, and greater self-esteem than their male counterparts. No significant differences emerged when comparing adult males with traditional-age males, although several differences were noted between adult and traditional-age females. Female adult learners scored higher on breadth of interest, responsibility, and value orthodoxy. They scored lower on anxiety, interpersonal affect, risk taking, social adroitness, and social participation.

Discussion

While there was not a difference between adult and traditional learners on general intellectual ability, four out of eight academic proficiency variables revealed greater adult achievement. There was not a significant difference for the Academic Profile total score, so it likely that the greater proficiency observed in adults is a fairly minor difference, despite its statistical significance. Most likely this difference can be attributed to the advanced standing of most adult students who transfer coursework from other universities. Put simply, adults have earned more credits, therefore, it is expected that their mastery of academic areas would reflect this.

Only three out of 16 learning style scales found differences between adults and traditional students. Many more differences were found between males and females within the adult sample, and when gender was matched between samples, other differences emerged between adult and traditional learners. A similar pattern of results was obtained with personality variables. Only four out of 15 personality scales showed differences between adult and traditional students. Matching subgroups on gender again revealed more differences, especially for females. It would seem that the most parsimonious conclusion from this study is that there are not so many differences between adult and traditional learners. An alternative interpretation might be that the few differences observed are particularly significant for the design of educational programs and that the variables on which no differences were observed are irrelevant to education. This alternative interpretation seems unlikely since all learning style variables could be expected to pertain to education, and since many of the personality variables for which no differences were observed also seem relevant for education, e.g., innovation, complexity, breadth of interest, etc.

Canfield Learning Style Inventory Types



The pie-chart figure comparing learning style inventory types between adult and traditional students illustrates the wide range of diversity within each group. The diversity within each group is visually striking; there are many pieces to each pie rather than a discrete pattern of pie slices unique to the two different groups. This finding, combined with the results presented earlier, should call attention to the inter-individual variability of students, while de-emphasizing the between-group variability that has become the foundation for justifying separate models of adult education. Put another way, we believe adult models of education have something to offer, but this should not just be offered to older learners. Likewise, traditional models of education also have something to offer, but this too could be offered to more than a single age group. More attention should be paid to matching individuals with educational programs. This match should be made on the basis of learning style and psychological need rather than on the basis of age.

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ATTRACTING THE ADULT STUDENT:
SHOULD WE PROMOTE CONVENIENCE OR QUALITY?

Jan M. Asnicar
Donald B. Clardy

Introduction

The expected national enrollment decline of the 1980's did not occur. Enrollment, in fact, soared at many institutions both public and private. While, in some instances, open admission provided broader access for many to post-secondary education, many adults were wooed back into the educational environment with promises of a "kinder, gentler bureaucratic experience."

Many institutions began active campaigns to attract previously untapped markets. These markets included displaced homemakers, the unemployed and those who were retired. The most lucrative market, however, was that of the adult professional who had both an interest in completing their education or in obtaining advanced education and the resources to support that interest.

The "working adult" was a broad category that cut across all occupational fields and provided institutions with the opportunity to build offerings that could appeal and support private industry within the community. Because this potential student market was also considered "prime consumers," the effort to build the adult enrollment focused on structural features that were considered critical to soliciting interest from that market.

This paper will identify a marketing strategy that is effective in the introduction of new programs offered specifically for the adult professional. Specific structural suggestions will be offered as to appropriate and effective advertising at the outset. In addition, this paper will focus on how to sustain successful adult programs and maintain an adequate adult enrollment. Finally there will be discussion on the differences between "convenience" and "quality" feature advertising. Included are examples of ads that illustrate the difference between quality and convenience advertising.

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The Evolutionary Process

The Introduction of Adult Programs

At the outset of a new program a strong marketing strategy must first clearly identify what is different about the college or university. Studies show that the most direct and effective way to reach a target market with a "new" message or concept is to list the features that make it unique. In providing an option for adults that is both different and feasible the initial promotion might simply state that "University X is offering something new and different - programs for adults." Building on what the institution is well known for is key as people begin to expand their perception of what the school is and what the school offers. Providing a "bridge" that demonstrates the logical extension of the school into the adult education arena will also assist the marketing or admissions department with the philosophical questions they will encounter.

Because higher education institutions are well known for traditional structure and delivery systems, considerable energy must be expended at the outset to deliver a different message. The customer must be, at the very least intrigued, and ultimately convinced that something is different and that the new offerings are built around their needs without compromising academic integrity.

Many schools that have experienced success have done so by emphasizing convenience as it relates to the adult programs. These features generally include:

*Accessible (interpreted as multiple sites)

*Accelerated (interpreted as "fast")

*Practical (interpreted as "less theory")

*Innovative (interpreted as "new and different")

Each focus on the convenience of the new program offering. Each will catch the eye of the working adult and possibly generate an inquiry. In most cases, each of these features also define how this new program option is different from what has previously been available.

It is important to convey a dual message however, that speaks to both the convenience of the new offering and the quality that is inherent in the institution. Quality features generally emphasize:

*Challenging curriculum

*Highly qualified faculty

*Motivated students

*Quality control systems

The placement and emphasis of these features in relation to the convenience features is dependent on several issues. First, the question of how well known the institution and its current program offerings are must be answered. A well known institution with a reputation for offering certain types of degree programs may have an advantage if the new offerings can be presented as similar. On the other hand, this could prove to be a challenge if the adult programs are breaking new ground for the school.

Second, the clientele must be identified and an appropriate advertising strategy developed that will appeal to the consumer the school is seeking. Are the adult programs geared to the blue collar or white collar segment of the population? Are the programs being offered in a rural or urban environment? Will the target population be funding the program themselves or will a good percentage of these people be receiving tuition assistance? Answering each of these questions will help define the marketing strategy that needs to be implemented and will more clearly identify how to effectively utilize both convenience and quality features.

Finally, timing is also an issue that needs to be explored. What may be extremely appropriate for a program introduction strategy may be less than appropriate for a long term advertising campaign that speaks to a better informed audience.

The challenge then, to those institutions choosing to serve the adult learner, is to create an image of institutional quality that will also serve.

The Challenge of the 1990's

Those institutions who took the plunge first in the late 1970's and early 1980's and provided alternative programs for adults enjoyed tremendous success. Those individuals who where involved in these ventures would have to admit, if they were completely honest, that the success was often derived in large part from being the "first on the block" with that option.

Today, however, adults are no longer an untapped market niche. This particular population has several available options ranging from correspondence courses to satellite courses (offered throughout the country by major universities) to convenient evening courses offered by both public and private institutions. Those "first on the block" programs are undergoing a normal maturation process as they move from being categorized as the "first and only" option to being recognized as being the "best" option available.

This subtle difference in advertising is illustrated in the appendices. Appendix A is an example of radio copy that focuses on the "quality" features of the adult programs and the institution. The university's tradition of excellence is the theme throughout the ad. While convenience features are included, the overriding message is that the university is the best investment available today.

Appendix B presents the flip side of the coin. This radio copy focuses on the convenience and accelerated nature of the program. Quality features are included, but they are not the overriding theme of the ad.

Focusing primarily on convenience features is tempting. However, there are two drawbacks to using that as the exclusive approach to marketing the adult programs. First, none of the convenience features convey any sense of quality. Those individuals involved in post secondary adult education are keenly aware that quality issues are where the majority of energy is expended. The consumer can be made aware of the institution's commitment to quality through the advertising of the adult programs.

Second, and even more compelling, is that there is nothing unique or even essentially difficult about providing a fast, untested, off-campus program. Being unique and being committed to high quality educational programs will attract and retain motivated students who will make impressive graduates for the institution.

Those institutions that will remain competitive in the 1990's in the adult education arena will be those that are able to integrate convenience with quality in the advertising strategy.

Conclusion

Most current marketing strategies take into account the attractiveness of quality and convenience. As competition for the adult market increases it will be important to build a long term strategy that will both protect the institution's market share and serve the institution well.

Below is a brief list of "Do's" and "Don't's" that could be applied to any institution that is building successful, long-term, high quality adult programs.

The "Do's"

DO:

*Promote "quality" along with convenience - this is what separates the "best" from the others

*Highlight program improvements

*Use corporate and individual student feedback to make academic improvements

*Focus specifically on high quality faculty and a rigorous curriculum

The "Don't's"

DON'T:

*Eliminate convenience features in advertising

*Stop using advertising mediums that have proven effective

*Stop asking your adult students what features attracted them to the program or the institution

*Eliminate convenience options that are essential to access for adults

The question for recruiters and marketing strategists has changed. The challenge is how to convey that concentrated effort on quality and improvement to a market that "shops for quality" and who believes "you get what you pay for" without jeopardizing the "drawcard" of convenience. This is not an impossible task. Those schools that master this skill will be offering competitive adult education programs in the year 2000.

APPENDIX A

Radio Copy

"A Wise Investment"

More than 600 professionals in the greater metro area have decided that University X is the best educational investment available.

X offers a bachelor's degree program in business administration and master's degree programs in management and business administration.

At University X our classes are taught by highly qualified faculty who make the learning experience both relevant and challenging. And because X programs are designed with the working professional in mind, students meet weekly in small and large groups and can complete their degree program in two years or less.

Become a part of the X tradition of excellence and involve yourself in a program that will reap personal and professional rewards for years to come.

Don't let your future wait another day. Call our office at...

APPENDIX B

Radio Copy

"Testimonial"

Maybe you're like me.

A working professional with responsibilities both at the office and at home who just never found the time to go back to school.

Then I heard about University X.

A business associate told me that X offers undergraduate and graduate degree programs with the working professional like me in mind.

In two years or less I can earn my master's degree in management or an MBA. For my colleague, Carol, who needs to complete her undergraduate degree, X offers a bachelor's degree program in business administration.

And because of X's strong reputation for academic excellence, I know I'll receive the finest education available.

So if you're in search of an educational alternative that works for you, I suggest you call University X today at... It worked for me.

ADULT LEARNERS' SELF-DIRECTION AND THEIR LIBRARY LITERACY

Kathryn V. Fitzgibbons

Introduction

A recent study conducted by the Carnegie Foundation for the Advancement of Teaching documents a distressing underutilization of academic libraries: one in four (27%) undergraduates spend no time at all in the library; one in two (51%) undergraduates spend less than two hours a week in the library; and over half the students never use a library to read primary source documents, although reading primary source material is well accepted as a means of developing critical, independent thinking (Boyer, 1987).

Dismayed by such findings, the authors of the Carnegie report found that campus libraries, all too often, are a "neglected resource" (Boyer, 1987, p.160). The authors of this 1987 report on undergraduate education firmly recommended that learning resources be introduced and instruction on library use provided to every student. Faculty were urged to restructure their courses deemphasizing textbooks and lectures and encouraging resource-based learning, so that students may "spend at least as much time in the library--using its wide range of resources--as they spend in classes" (Boyer, 1987, p.165). Extending classroom instruction to include library use encourages students to become self-directed, independent learners. Fully consistent with the goals of adult education, the Carnegie report concludes that the library must be viewed as vital to a quality college experience.

However, there is a lack of attention given in College: The Undergraduate Experience (Boyer, 1987) to adult students despite knowledge that their numbers on college campuses are rising. The Chronicle of Higher Education (1988, Mar.30, p.A35) projected that in the decade of the nineties, students over twenty-five years old will comprise over 50% of college enrollments. This growing proportion of learners is shifting adult education from a marginal to a central concern of higher education (American Council of Education, 1984). Such demographic figures dramatize the need for academe to respond to fundamental change in the student body composition (Cross, 1981, 1980; Apps, 1980; Keeton, 1976). Adult students merit the same opportunity as traditional students for quality education. This study considered whether or not adult learners neglect libraries (as do traditional students).

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Library automation and the information explosion combine to make libraries a place where user self-direction is enhanced. Because libraries have changed dramatically over the past decade, even the presence of prior library effectiveness among older students requires examination. For adult students who have been infrequent users of libraries, modern libraries may be threatening.

Electronic catalogs are replacing the familiar wooden card catalogs posing new models for librarians as well as users (Nielson, B., 1982). Computer data bases form a library network on campuses from coast to coast, storing over 20 million bibliographic records. (Before 1981, Library Literature, the monthly index for all aspects of libraries, did not have an entry for microcomputers. Today, more than fifty periodicals on library technology alone are published in the United States). Do returning students suffer from presumptions that they already have learned how to use libraries, or that they can negotiate their way in libraries without needing any special assistance or instruction? Are adult learners withdrawing from the challenge of library literacy, and thus, losing an important resource for lifelong learning?

Literature

In the literatures of adult education and library instruction, the case is made for empowering the individual for lifelong learning. Both library literacy and self-directed learning have been identified as important for lifelong learning; both are demanded in today's society of accelerated change and exponential growth of information. In this study, library literacy is defined as the range of attitudes (affective) and skills (cognitive) needed to use libraries effectively--a continuum based on desired results (Michaels, 1985). Self-directed learning is defined as the process by which individuals take the initiative, with or without assistance from others, to set goals and persist in continuing learning (Oddi, 1984).

Based on the adult education literature (Boud, 1981; Cross, 1981; Knowles, 1980, 1975; Oddi, 1987; Tough, 1982, 1971), one would expect to find a strong relationship between adults' self-directed learning characteristics and library literacy. Self-directed learners are described as independent, self-motivated, proactive individuals who exercise initiative in setting learning goals and strategies and accept responsibility for their learning efforts (Knowles, 1980). If self-direction is both the means and goal of adult education (Mezirow, 1981), libraries are surely a laboratory for "helping adults learn how to learn" (Smith, 1983).

Moreover, it can be presumed from reading literature on library users that self-direction is necessary for competent library use because there is minimal and asystematic library instruction for university students (Wagner and Kappell, 1987). The characteristics ascribed to self-directed learners are demanded for users' effective library performance. However, what literature exists on nontraditional students and library use indicates that many adults have needs not met adequately by libraries. Many adult learners are anxious and insecure in the automated library environment and may not be meeting the challenge of library literacy (Dugan, 1985; Fisher, 1979; Sheridan, 1986). Brookfield (1987) admonishes adult educators not to presume that adults are in full control of their abilities.

While it seems likely that a degree of self-directedness is necessary for effective library use, no study had been conducted to support such a proposition. Although there has been attention given to adult learners' self-direction, there had been no focus on adult learners' library literacy despite their increasing representation on campuses, nor since the information explosion and technology have impacted libraries.

Thus, this research was undertaken to investigate the relationship between self-directed learner characteristics and their effectiveness (cognitive and affective) in using libraries in an adult student population. Also, differences in self-direction and in library literacy for sample subsets, defined on the basis of selected demographic and descriptive factors, were examined.

Methodology

Sample population

This study was a quantitative investigation of the association between adult students' self-directed learner characteristics and library literacy. Additionally, data were analyzed on selected descriptive and demographic factors that included age, gender, hours spent using libraries during a typical week, major concentration of study, library orientation/instruction received, frequency of assignments requiring library use, academic credit hours earned, and grade point average.

The sample population (n=133) was drawn from undergraduate part-time students enrolled in a large, public institution serving such students through evening and/or weekend classes. Data were collected from students in advanced courses to maximize chances that subjects had completed at least 60 college credit hours, and, therefore, had been required to utilize library resources related to their postsecondary education.

Instrumentation

Two instruments were used to conduct this study. The Library Literacy Assessment Test (LLAT) was used to measure both attitude toward and knowledge of library use. It was constructed by the researcher after extensive investigation determined that there existed no available instrument to measure library literacy at the postsecondary level. Development of LLAT was based upon "The Model Statement of Objectives for Academic Instruction" formulated in 1988 by the Association of College and Research Libraries' Bibliographic Instruction Section (ACRL/BIS). Additional resources were provided by the Library Orientation Information Exchange (LOEX). In addition to the total LLAT score, two subscores, one indicating the affective (12 Likert-type items) and the other, the cognitive (29 objective items) domain of LLAT were calculated. An acceptable degree of face validity was achieved as a result of pretest and professional evaluation procedures.

Self-directed learners' characteristics were measured by Oddi's Continuing Learning Inventory (OCLI), a Likert-type, self-scoring questionnaire (24 items) developed in 1984 by Lorys Oddi. The twenty-four items yielded an internal consistency (coefficient alpha) of .87; test/re-test reliability was .89. Estimates of construct validity indicated that OCLI is a valid tool for identifying self-directed continuing learners when used in its entirety (Oddi, 1986).

Data analyses

Pearson's Product-Moment Correlation (r) was computed to determine the strength of the relationship between the primary (instrument) variables. Descriptive statistics were calculated on tabulated results of collected descriptive and demographic data; these statistics provided a basis for redefining the sample for further analysis using, as appropriate, Pearson's r, analysis of variance (ANOVA), and Student's distribution of "t" (t-test).

Summary of Major Findings (p =.05)

The relationship between library literacy (LLAT) and self-directed learner characteristics (OCLI) was statistically significant at the .05 level (r=.169*). Self-directed learner characteristics were positively related to age (t= 3.14*). The affective component of library literacy was related to hours of library use (t= 2.66*), as was the cognitive component of library literacy with library instruction (t=2.14*). Grade point average correlated significantly with the cognitive component of library literacy (r=.18*) as well as with self-direction (r=.16*). No significant relationships were found between gender, academic major, library assignments, or credit hours earned and self-directedness or library literacy.

Discussion

This investigation was undertaken integrating the notion of self-directed learning into higher education, and relating measures of personality attributes to measurement of objective accomplishment. Evidence of a modest relationship between self-directed learner characteristics and library literacy was found. Such results hold encouraging implications for planners and educators involved with adult learners. Moreover, data collected identify promising directions for future research.

This study supports the assertion that older adult learners are more self-directed than younger adult learners. Educators, however, should not assume that age influences library literacy, that older students do not require attention for effective use of library resources. Performance between males and females on measures of self-direction and library literacy did not differ; therefore, taking gender into account when planning for the enhancement of either is unwarranted.

While different academic majors made little measurable difference in OCLI and LLAT results, students who had earned a higher grade point average were more self-directed and knew how to use libraries more effectively than those students with lower grades. The profile of adult learners who continue their education in formal postsecondary levels of education consistently describes individuals who are achievement oriented and goal directed; such characteristics are supported by this research.

When asked to report how many hours they typically spent using libraries during the week, adult learners in this sample responded in remarkably similar fashion to the traditional college students in the Carnegie study (1987). One-quarter of students spend no time in libraries at all, and one-quarter spend one to two hours a week using libraries. The Carnegie study reports that 27% of undergraduate students never use libraries to develop bibliographies and 40% never use libraries to trace leads; for adult learners in this study the percentages were 35% and 48%, respectively. From data collected in this study, nontraditional students were using library resources even somewhat less than traditional students.

Works in adult education that offer strategies for "helping adults learn how to learn" hold direct implications for resource-based projects requiring library use. Based on this study, neither library assignments nor library instruction were related to self-directed learner characteristics. Such results serve to indicate that generalizations regarding adult self-directed learners that extend to their abilities in using libraries effectively are questionable. In fact, collected data (from subjects who had earned between 60-170 credit hours) support the implication that adult learners need assistance in developing both their self-direction and library literacy.

A persistent theme throughout library literature during the past decade has been the challenge that larger and more electronically sophisticated libraries pose for library users and for librarians in working with users in this new environment. When compared with students who had received no library instruction, those students who had some instruction performed better on the cognitive component of library literacy. There are many implications that involve faculty and curriculum, as well as libraries, that remain subjects for further investigation.

Summary

This study provided a measure of adult learners' self-directed characteristics in relation to their library literacy. By providing empirical data necessary for planning strategies and techniques to strengthen self-directed learning and/or library literacy in adult learners, this research has significant potential for faculty and administrators who view development of self-directed, independent learners as a goal of higher education. As a result, adult learners could benefit from this study's findings. The library can be seen as a laboratory for the development and expression of independent learning. The goal of adult educators and libraries converge: empowering the individual for lifelong learning.

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DEVELOPING NEW MODELS FOR SPECIAL CONSTITUENCIES

David Fox
Bonnie Blystone
Denise Lucy

The College of Professional Studies (CPS) at the University of San Francisco (USF) offers undergraduate and graduate degree programs with majors in Organizational Studies and Public Management designed specifically for adult learners. The College was founded on the pedagogical model of experiential learning; the classroom fosters a learning environment emphasizing seminar discussion and interaction between student and instructor.

Consistent with the Jesuit mission of USF, CPS has at the foundation of its academic program an emphasis on values, morality and intellectual honesty. The College seeks to develop in students leadership qualities and skills they can bring to their professional and personal lives. Special features of the program include a cohort model in which students attend class one evening a week at the main campus or at regional centers throughout California and take courses in a modular sequence of study.

The undergraduate program is designed to serve the upper-division, degree completion student who has the equivalent of two years of college experience. It attracts mid-career professionals from the public, private and independent sectors, including, on a consistent basis, employees of Pacific Bell and Pacific Bell Directory.

Pacific Bell and Pacific Bell Directory are two of the four operating companies of the Pacific Telesis Group, formed in 1984 as a result of the AT&T divestiture. A primary goal of Pacific Telesis is to remain a leader in the highly competitive telecommunications industry. The organization emphasizes the importance and need for continuous development of technical and management knowledge and skills in its 67,000 employees. All have had extensive training through the company's different training groups; some courses are approved for academic credit by the American Council on Education (A.C.E.) through the National Guide.

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The Telesis Management Institute (TMI) was established in 1985 to provide some of those educational and training opportunities for employees. One group within TMI, Self-Directed Education, is specifically charged with providing Pacific Telesis employees with university-based educational information and opportunities, on college campuses and on-premises at Pacific Bell facilities, and via media-based delivery systems. USF is one of dozens of schools providing educational programs on-site at Pacific Bell and Pacific Bell Directory.

With the success of USF's on-premises two-year degree completion programs, Self-Directed Education approached the CPS to design a four-year, accelerated, cohort-based program leading to a Bachelor of Science, with a major in Organizational Behavior and a minor in Telecommunications. Three specific curriculum design features are notable. First, given that prospective students have an average age of 40 and little or no college experience, a "Gateway" program of pre-college preparatory courses in Math and English has been developed for those whose placement testing suggests deficiency in one or both of these subject areas. Second, as well as reviewing and modifying the upper-division major, lower-division prerequisites and major courses and minor courses relevant for the student population were identified. Finally, Self-Directed Education was interested in establishing an educational "partnership" with the University by incorporating into the curriculum many of the technological and management developments achieved by the company. As a result, selected courses in the major and minor incorporate relevant and related Pacific Bell technical and management training courses as learning laboratories; CPS faculty and Pacific Telesis training managers determine those training principles which apply the theories and concepts examined in course work to practice in the work place.

The program requires students to complete 128 semester units: 39 in the major, 18 in the minor, 45 in the University's General Education Curriculum, 13 in required support courses and 13 in elective courses. Each academic year, taught over 40 weeks, consists of two twelve-unit semesters and a six-unit intersession. To satisfy all degree requirements within four years, students must take two courses at a time and attend class two evenings each week. Students may transfer units from regionally accredited colleges and universities; transfer credit may also be awarded for courses approved by A.C.E. or through the College Level Examination Program (CLEP). Through an experiential learning portfolio, students also may petition the University for academic credit by demonstrating college level learning based on professional and personal experience.

Our experience in CPS has shown us that extending a program in the ways described above presents the University with several challenges, not all of which were apparent at the start, and not all of which are easy.

As the contracting agency, Pacific Bell has a legitimate concern and expectation for quality and quality control in the academic program. Some of their monitoring systems, especially related to evaluation of faculty and student performance, could have created a potential conflict with the University's (and its accrediting agency's) equally legitimate concern over institutional control of academic integrity. Addressing these issues and establishing parameters for quality control before talking to a single potential student avoided a problem later.

As a corollary to this, it is equally important to make sure students are aware that the standards for students and faculty are established and maintained by the University. On occasion, some students erroneously and inappropriately believe that they have influence over the application of standards because their employer is paying tuition or because the program is offered on-site.

The question of ownership can also extend to those academic and administrative units within the University that serve the program. While one unit may take the leadership (in procuring the contract, in program management, etc.), all units must accept equal responsibility for the delivery of the program. If not, competition for power, resources or control, or abdication of the same, will ensure that the institution as a whole will lose. This knowledge helps us deal successfully with the power struggles inherent when units that typically function autonomously work together.

Although Pacific Bell approached the College of Professional Studies, it was clear from the outset that the College of Arts and Sciences had to be involved to provide a comprehensive General Education Curriculum. This contract creates an opportunity for the two schools, working for a common purpose, to confront a long-standing mutual antagonism (that is by no means unique to USF) that is a function of conflicting beliefs about traditional and non-traditional education. The challenge to Professional Studies is to demonstrate that it holds and upholds academic values and the mission of the University within a delivery system and pedagogy appropriate for the adult student population. For Arts and Sciences, the challenge is to adopt such a pedagogy and delivery system with confidence that academic integrity is not compromised. There appears to be great willingness and effort by both schools; there has been some collaboration on curriculum and course design as well as in cross-college faculty training which is necessary to ensure a coherent academic experience.

Understandably, Pacific Bell wants a seamless, transparent administrative structure and a single contact person within the University, one who has the authority to negotiate within and around the institution and get things done. While the students and corporate administrators acknowledge the complex University bureaucracy, their expectation - and rightly so - is for simple, speedy and competent service and problem solving. Indeed, it was the positive experience in the administration of the upper-division program, as well as academic excellence, that became a significant factor in Pacific Bell's selection of USF as the institution to offer a four-year program. Translating the systems developed over years for successfully managing the two-year degree completion program has required considerable effort and cooperation across several academic and administrative units. A coordinating committee made up of high level staff from Professional Studies, Arts and Sciences. Admissions, Registrar and Bursar meet regularly to review and adapt academic and administrative policy and procedure.

Finally, and perhaps most important, implementation of this four-year program has had a ripple effect on the upper-division program. With an emphasis on degree completion, attention has focused only on satisfaction of unit requirements for graduation rather than on the total undergraduate career. That is, development of a four-year curriculum has given rise to the issue of a balanced program for all College of Professional Studies undergraduates, in terms of not only major, general education and electives but also the broad-based body of knowledge the College wants its students to have when they graduate, including lower-division foundation courses in and prerequisites for the major. As faculty and academic administrators address these questions, major revision of the degree completion program is the inevitable - and desirable - outcome.

Such revision, while positive in terms of the quality and maturity it will add to the degree completion program, will likely also have consequences for student recruitment. A more balanced program implies greater emphasis on satisfaction of degree requirements as well as satisfaction of unit requirements; degree completion will be more complicated for students than it is now, with a potentially negative impact on enrollment. Revision may also significantly affect both program design and, as a result, the delivery system, particularly the cohort model. If, for example, Social Psychology is a prerequisite for the major, there are consequent design issues related to when and how that course is to be offered for students who need it and delivery issues related to the integrity of the learning group for those who do not.

Raising curricular issues such as these, although necessary, also creates some cognitive dissonance for faculty and staff. While this project with Pacific Bell will ultimately lend more credence to all College of Professional Studies programs, it would seem that the College is becoming more traditional and moving away from the non-traditional identity we have had - and valued - for so many years. By far, the greatest challenge we face is to improve the quality of the academic program without losing those very qualities of non-traditional education for adult learners that have made us so successful for so long. We are confident that our efforts in resolving all of the issues of program design, delivery and administration will lead to a stronger program, College and University.

GENERAL EDUCATION REQUIREMENTS MUST ACCOMMODATE ADULT TRANSFER STUDENTS

William Giczkowski

One common element can be predicted in all new proposals for general education requirements. Faculty and administrators alike will agree to put off all issues related to transfer students until some later time. Typically a new general education proposal will be constructed from the ground up, starting with what students must take in their freshman year and proceeding through a four-year program. Transfer issues will then be dealt with last in the form of reluctant exceptions to whatever framework has been so carefully formulated.

The problem with this course of action is that for some institutions, transfer students have become the rule and not the exception. Compounding the problem is the additional fact that the vast majority of transfer students are non-traditional students, adults in their thirties and forties who are returning to universities after having started families and established themselves in their communities and their places of work. Indeed, Policy Perspectives of the Pew Higher Education Research Program calls this new group of students higher education's New Majority.

To be sure, many prestigious colleges and universities have been able to remain largely unaffected by the enrollment trend of the last decade. They continue to receive a large number of applications from students in the traditional age group and are free to choose from among a wide variety of general education proposals internally generated by faculty committees or adapted from some external model. Lynne Cheney's 50 Hours: A Core Curriculum for College Students is a good example of the latter, or the more controversial Stanford program Culture, Ideas, Values (CIV).

However, a steadily increasing number of fine colleges and universities do not have this luxury of choice. They depend on tuition as their main source of revenue and have discovered that the pool of traditional students is shrinking and will in all likelihood continue to do so. These institutions have put together highly innovative programs for adult transfer students and have attracted them in such large numbers that in some cases transfer students form well over half the undergraduate enrollment.

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Universities with large populations of non-traditional students did not necessarily plan it that way. For decades many of these schools provided a fine traditional education to unmarried students who lived in dormitories and stayed a full four years. The general education requirements for these students quite fittingly took the form of an intellectual coming of age or an introduction to great ideas. Such a curriculum however, is unlikely to be appropriate for middle-aged students who have already lived through a good deal of contemporary history, wrestled with a whole range of ethical problems, and developed a comprehensive view of the world through their own experience.

These students return to finish their degree programs and sometimes find that though they can look forward to an outstanding major program of course work, they must still deal with vestiges of general education requirements that reflect the needs and capacities of another generation of students. A student who is forty years old, for example, may find a foreign language requirement something of a hardship, since language-learning ability declines markedly with the individual's temporal distance from puberty.

If the average age of students is in the thirties, general education courses cannot be fashioned as introductions to intellectual life. These students must be presumed to have had an active life of the mind before entering the university. Travel, professional work, and the personal and social adjustments made by the time the student has reached middle age cannot be ignored. For them, the search for a personal identity and value system is pretty much over, and idealism is tempered by a strong dose of practicality.

Consequently, general education task forces and committees must place emphasis on requirements designed to complete an education already in midstream. Some consideration must be given to learning outcomes arrived at from the student's experience. Moreover, for these students, much of what general education is supposed to promote concerning social responsibility and civic awareness has already been accomplished. Service to society and leadership are daily realities for them.

Clearly, the general education curriculum in any university must respond to the needs of the students who actually enroll at the institution. Faculty and administrators should make a conscious effort to determine who the students are demographically and statistically. Such an effort is necessary because students in the traditional age group tend to be highly visible on any campus during the nine-to-five work week; working adult students, on the other hand, are less visible because they take their classes in the evening, on weekends, or at extension centers. Indeed, because adult students are older and frequently attend classes in business attire, they are sometimes mistaken for administrators or even faculty.

As the first order of business, the members of any university task force or committee concerned with general education should seek information from the people who have the facts on enrollment: admissions officers, recruitment counselors, and institutional research directors. What percentage of undergraduates enter as freshmen? As transfer students? As upper-division transfer students? Have the percentages changed since the last general education curriculum was introduced? What percentage is within the traditional age group of 18 through 21? What percentage are thirty or older? Are there large numbers of evening students, military personnel? Are there a large number of transfers with Associates degrees? Are minority students represented among both four-year and transfer students? Will a change in general education requirements affect the University's commitment to diversity positively or negatively?

As a matter of fact, this initial inquiry into enrollment, obvious and necessary as it may seem, will probably be neglected or overshadowed in the midst of the inevitable turf battles that curriculum revision produces Academic departments can be depended on to introduce a host of learned authorities whose message is always the same: No student can be called educated without taking that department's courses. Proponents of traditional requirements will remain steadfast even as young turks try to add new ones. Professors whose fields suffered cutbacks in previous discussions of general education will see an opportunity to right perceived wrongs and recoup losses suffered in bygone curricular wars. Obscured in the haze of battle will be any real sense of who the students are or how they may be affected. To avoid this change of focus from the students to the departments, faculty and administrators can articulate some simple guidelines even before committees or task forces on general education are formed, for example:

1. The general education curriculum should be consistent with the university's statement of its mission and goals.

2. The general education curriculum should respond to the needs of the students who actually enroll and are likely to enroll in the near future.

3. Any new curriculum should have a broad range of support across programs within the university.

4. The principle of conflict of interest should be observed: If a department stands to benefit from a requirement, it cannot have the sole voice in determining that requirement.

5. Changes which might adversely affect the university's commitment to diversity should be discouraged.

Practical alternatives will follow naturally. When the university's transfer enrollment is high, the number of required courses must be low. For distribution requirements, a policy of liberal equivalency from the student's previous course work should be adopted. A full range of substitutions and challenge exams should be available to the student.

Experiential learning has to be considered in this context; and since experiential learning does not come in convenient three-unit blocks, one and two-unit courses may need to be developed to complement the student's experiential learning outcomes. Experienced academicians will doubtless find it difficult to break out of the mindset which expects courses to be offered for three or four units. Nevertheless, the overarching consideration has to be the student. A determined effort must be made to provide course work that is challenging and instructive for adult transfer students as well as for traditional students.

If the university's transfer enrollment is mostly upper division, then the total number of units required in general education needs to be low because the university must be prepared to accept sixty-odd semester units in no predictable pattern; any major will account for a year or more of course work, and so if an upper division transfer student is to graduate in four years, the general education curriculum cannot account for more than thirty semester units.

Academicians who want to preserve their sanity may throw up their hands over all this accounting and decide to frame general education as a set of goals rather than unit totals. Institutional resistance will be strong to such a move, but enrollment realities may make it necessary. Historically, the whole notion of general education requirements arose earlier in this century when students in the traditional age group constituted 99% of the student body nationwide. Today there is a different student population, and universities must now consider changes in the concepts and delivery of general education courses that address the needs of this new group of students.

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THE BACHELOR OF LIBERAL STUDIES:
THE STUDENT

Stanley L. Groppel

Introduction

The American education system has been experiencing a phenomenon in enrollment of a new population at the higher education level. Nontraditional/adult students make up an ever-growing segment of the college scene. Mary Washington College (MWC) has experienced an increased enrollment in the adult student population that is similar to that of institutions across the nation. Twenty-one percent of the students enrolled at MWC are adults (twenty-four years of age or older). Fifty-nine percent of the adult student population at MWC are enrolled in the Bachelor of Liberal Studies (BLS) Program.

Approximately 15 percent of the total student population at MWC is in the BLS Program. The BLS degree is specifically designed for adult students who have been pursuing careers. The BLS program recognizes that significant learning can occur during a person's career endeavors as well as in avocational activities. The BLS program is an individualized program for adult students who want to formalize their educational achievements via a college degree.

The BLS degree offers greater flexibility in scheduling and the timetable leading to graduation. Students are not required to have full-time enrollment or extended MWC residence. Bachelor of Liberal Studies students work toward their educational goals at their own pace. The BLS program allows students to continue their personal and career pursuits and attend college simultaneously. The BLS also recognizes the value of knowledge gained in living by converting applicable life experience into academic credit.

The BLS program is designed specifically for nontraditional/adult students. In addition to the BLS students who are enrolled at the MWC campus, there are BLS students enrolled at several consortium colleges. Mary Washington College is a member of the Central Virginia Consortium for Continuing Higher Education which consists of eleven member colleges and universities. Approximately 50 BLS students are presently enrolled in course work at these member institutions. The BLS students enrolled at consortium institutions are actively pursuing the BLS degree.

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Individualized Learning

Mary Washington College, in an effort to serve the nontraditional student population of the community and Virginia, has developed the BLS Program. The BLS Program serves students over the age of twenty-four (24) who have a minimum of fifteen semester hours earned at a college or university prior to applying for admission to the program.

Students may earn credits in several ways. Traditional college credits may be earned at accredited colleges or universities prior to and after entering the BLS program. Students may earn credits by successfully completing challenge examinations that demonstrate understanding and knowledge of the material of a specific college course. Bachelor of Liberal Studies students may earn credit for training and courses they have completed in industry or the military, correspondence courses, telecourses or self-fulfillment courses. The student must provide documentation for the courses and in some cases must complete an interview with the BLS Assistant Dean and BLS Committee in order to receive credit for specific courses.

Bachelor of Liberal Studies students may receive credit for life/work experiences by presenting a portfolio to the Assistant Dean and the BLS Committee. The portfolio is reviewed by an appropriate faculty member who will make a recommendation to the Committee concerning the academic value of the portfolio experiences. Knowledge gained from work, hobbies, self-study or other means may be presented through the portfolio process.

Academic Requirements

The BLS Degree requires 120 semester hours of credit for completion. There are three specific categories in which the credits must be earned. The three categories are: 1) General Education; 2) Core Area; and 3) Electives. The student must earn a minimum of 27 semester hours of credit in the general education category. The general education component is divided into four subcategories.

Six semester hours are required in humanities. These six semester hours of credit can be achieved by completing courses such as art appreciation, art history, classics, drama, history of film, literature, music appreciation, music history, philosophy, and religion.

Six semester hours are required in social sciences. These six semester hours may be accomplished by completing courses such as anthropology, economics, geography, history, historic preservation, linguistics, political science, psychology, and sociology.

Nine semester hours or required in natural sciences and Mathematics. A minimum of one science and one math course are required in this category. These hours may be earned by completing courses in astronomy, biology, chemistry, geology, mathematics, and physics.

Six semester hours must be earned in communication arts. These credits may be earned by completing courses in art theory , computer language, logic, music theory, performing arts, photography, speech, studio arts, creative writing, and foreign language.

The credits for these categories may be earned through traditional course work or they may be earned through challenge examinations, and life/work portfolios.

The core area is the specialized area of study that equates to a major in a traditional program. Students must earn forty (40) semester hours of credit in this area. The specific courses that will apply to this category are determined by the student and the student's mentor. These courses must be approved by the Assistant Dean and the BLS Committee.

The electives section will contain a minimum of fifty-six (56) semester hours of credit. These courses are usually any courses that do not apply to the other categories within the degree. Elective credits may be earned by traditional or nontraditional methods.

The BLS Student

The BLS program began with seven (7) students in 1977 and its first graduating class was in 1978 with three students graduating in the May ceremony. The number of students in the program has grown steadily to the present enrollment of 403 students who are actively pursuing the degree at Mary Washington. The 1990 BLS graduating class totaled 119. To date a total of 688 students have earned the Bachelor of Liberal Studies Degree.

Adult students usually have returned to school because of experiences in their lives that have changed their needs. Many times they are seeking a life change of one sort or another. Schlossberg, Lynch and Chickering (1989) reported that adults returning to school were involved in a transition period in their lives. Knowles (1984) reported that adults develop a readiness to learn when they encounter a need to know or do something in order to effectively perform in some situation in their lives. Most adults return to school in order to gain knowledge to meet immediate goals (Cranton, 1989).

Adults coming to the BLS program to continue their education are as varied in backgrounds as are all the adults we find on college campuses today. Sixty-six percent of the BLS students are female and 34 percent are male. The average age of the BLS student is 35; the minimum age being 24. The older students in the BLS program are in their sixties. BLS students come to the program with varying needs and goals.

One student came to the BLS Program after working with children's programs in day care centers and as a substitute teacher for approximately ten years. This student has a goal of becoming an elementary teacher and hopes to earn credit for learning that was gained through life experiences. This particular student began the higher education process at a young and less focused age. The education pursuit for this student was interrupted by marriage and a family. Twenty years have passed, and now she has made the decision to return to school in an effort to achieve the goals set at an early time.

The BLS Program serves students who live near MWC and who do not need to commute a great distance to attend classes. Mary Washington College is in Fredericksburg, Virginia which is located between Washington D.C. and Richmond, Virginia on Interstate 95. The community is growing rapidly and the number of people wanting to continue their education is increasing significantly. There are several military installations nearby and industrial growth in this area is also on the increase. As a result of the size of the community and the growth that is occurring, most of the students live close to MWC. Students in the BLS Program travel an average of sixteen (16) miles one way to attend classes at MWC.

Another student had similar experiences to the previously mentioned student except that the original goals were to be the best housewife and mother she could be. She has accomplished that goal. She has successfully completed some classes over the years. Among the many part-time jobs she had in her career, one was as a teacher's aid. For two years she lived in France and worked with French speaking people. She decided she would like to become a high school foreign language teacher. Some of her credits toward her BLS degree will be earned through a life/work portfolio and challenge examinations.

Adults who have returned to college usually have many other activities in their lives besides earning an education. BLS students are very typical in this regard. The other activities in their lives impact the time available and quantity of courses each one enrolls in each semester. The BLS student quite often will take courses one semester and not take courses in the next semester. Most always the student will return to the college in the following semester. One-third of the BLS students take courses at night and the other two-thirds are enrolled in traditional day classes.

Although there are grants and scholarships available to students who qualify, most students are paying for their own education. Twenty-seven percent reported that their employer assisted them financially in their educational endeavors. Twenty percent of the graduates reported that their employer provided one hundred percent of their educational expenses.

Portfolio Credit

Earning credit for life learning experiences is a very important part of the BLS Program. When BLS students are asked why they chose the BLS degree over a traditional degree, they most often list the option of credit through a life/work portfolio as their primary reason. There have been a total of 1,745 students who have entered the BLS program and of this total 201 (12 percent) successfully sought credit for life/work learning experiences. The 201 BLS students who sought credit for life/work learning had 247 portfolios assessed for credit. The average credit granted for portfolios was eight semester hours. The average number of portfolio credits granted to each student who presented portfolios was ten semester hours.

Transfer Credit

Many of the BLS students bring significant college transfer credit to the program. In recent transcript evaluations, there were several students who had earned more than 90 semester hours of credit prior to applying to the BLS program. A review of data concerning the 1990 BLS graduates indicated the average transfer credit for this group was 74 semester hours. The opportunity for transferring a significant number college credits to the BLS program is an additional incentive to students and has a high rating among reasons for selecting the BLS Program over traditional programs.

Resident Credit

Bachelor of Liberal Studies students must earn a minimum of 30 semester hours of credit in residence. Resident credit must be earned after admission to the BLS Program. This credit may be earned by completing traditional courses, independent study courses, and internships at MWC. Students may also earn resident credit at one of the Central Virginia Consortium colleges or universities by first gaining permission from the BLS Director. Resident credit is not MWC Campus specific but the 30 semester hours must be supervised by MWC. Data for the 1990 graduating class show that among that group of students, they averaged 55 credit hours in residence at MWC. Of the 55 credit hours earned in residence by the 1990 graduates, an average of eight credit hours were earned at consortium institutions.

Academic Record

Bachelor of Liberal Studies Students have done very well academically. The average grade point average (GPA) for the core area for BLS students was 3.18 (based on 4.0) and the overall GPA was 3.13 for the 1990 graduating class. The GPA for graduating BLS students is based on all resident (including consortium resident credit) and MWC credit. The data for traditional underclassmen at MWC indicated the average GPA was 2.4279, while the average GPA for BLS underclassmen was 2.5148.

One of the most frequent questions from prospective students regarding the BLS degree is how long does it take to complete the degree. The data show that the average BLS graduate finished the degree in three years. Approximately one-third of the BLS graduates continue their education beyond the BLS Degree. The graduate degrees they pursue vary greatly.

Careers

The varied occupational background of the students continues into their careers after earning the BLS degree. Many students come to the BLS program with expectations of improving their career status by earning the degree. Eighty percent of the graduates said that the degree had a significant positive impact on their career. The graduates of the program are impacted in other ways than their career. Ninety-two percent of the graduates indicated that they felt significant personal growth during and after completing the BLS degree. With any baccalaureate degree, it would be assumed that graduates would improve their quality of life through career and other aspects of their lives. The BLS graduates indicated that they experienced a significant improvement in their cultural awareness as a result of the education they received. Seventy-two percent indicated a perception of a significant improvement in this area.

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STEPPING OFF ON THE RIGHT FOOT:
AN ORIENTATION PROGRAM FOR RETURNING ADULT COLLEGE STUDENTS

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The word for "change" in Chinese is actually two characters: the top one is the symbol for "danger" and the bottom one is the symbol for "opportunity," delineating the double edge in the meaning of "change." When an adult contemplates the return to higher education after a long hiatus, it is with the feelings subsumed in both of these words. With these feelings in mind, it is important for the institution to address them so as to decrease the dangers involved and increase the opportunities. One way both of these issues are addressed at Barry University is through a new student orientation. This program helps to manage the pain of change from non-student to student while at the same time increasing retention rates for the University.

It is important to identify those factors that influenced adult learners first to reenter; second, to propel them toward successful adaptation to the environment of higher education; and third, to achieve their set goals. Once the factors are identified, it then becomes necessary to address them in ways that are meaningful to the newcomers. What better way to allay many fears and apprehensions than with an orientation! Not only are the potential roadblocks identified and discussed, but they are laid to rest with appropriate rebuttal or rational discussion.

Many adult students return to academe with the vivid and horrible memories of a traditional experience when they were much younger. Daily, in initial interviews and advising sessions, students are seen who fearfully relive those past experiences and question their abilities to succeed while acknowledging their need to do so. As with the Chinese character for "change," they remember the "danger" but strive for the "opportunity." While studies based upon adult women students' reentry into higher education found no definite pattern, it has been our experience that an element of "change" has been the primary activator for

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reentry. Students are concerned about academic skill deficiencies in preparation for classroom competition for good grades. A disjunction exists between what students are required to do and what they are prepared to do.

The philosophy of the successful educators who work with the non-traditional adult learner must be one of understanding the learners' needs, to openly address those needs which include their apprehensions, fears, and outright "cannots." After the acknowledgement of needs, then follows an awareness of the many time and energy constraints endured by adult students apart from the classroom. We are dealing with adult students, professionals in their fields, who need the degree in order to achieve their goals, whatever they may be. It is the responsibility of practitioners in higher education, particularly in non-traditional education, to provide the ambiance, opportunity, and curriculum best suited to these students.

The question is whether the student or the institution should adapt to the needs of the adult student. Actually, adaptation and accommodation occur on both sides. Barry University, through the programs in the School of Adult and Continuing Education, attempts to adapt and accommodate through its continuing effort to improve and to change with the times. Programs are designed to meet students' program needs; short terms are offered in order to maximize credit accumulation and to expedite degree completion; and class times are arranged to fit into their full-time work schedules while at the same time allowing for quality time with their families. All are important factors in the mix of "adult learner."

With traditional students, past grade point average and standardized test scores are preliminary considerations for acceptance into higher education. With adult, non-traditional students, those measures taken from their traditional student period are no longer accurate predictors. The majority of reentry adult students fared poorly when in the traditional student mode. That factor compounds their reluctance to reenter. So, why reenter? This group of adults has a need to develop a new career or to achieve a higher level within their chosen path, to be realized only through completion of the baccalaureate degree.

The decision process of a prospective reentry student consists of at least three separate actions. First, is the desire to return. Next, is it worth the effort? If the benefits outweigh the liabilities, then reentry occurs. Last, if degree completion is to occur, perseverance must be demonstrated. Typically, the type of adult student brings to our program one or more of the following motivation traits: potential for change, self-motivation, or professional/social/familial support systems.

Literature Review

Due to the dichotomy of information from institutions surveyed and that which was found at Barry University, the literature was searched so that we could either substantiate our findings through looking at the statistics of other institutions or negate our efforts. It was noted that institutions creating opportunities for life long learning or programs convenient for the adult learner found that appropriate counseling and advising were factors toward success in retaining students. Adult learners are defined as those persons who are over 25 years of age, involved in part-time study, working, commuting, and having economic and personal responsibility for self.

The literature regarding orientation programs for transfer students reveals a strong agreement among educators that a period of orientation to college is necessary (Gardner, 1981). Institutions of higher learning recognize that successful adjustment to college life goes beyond academic planning. Ramist (1981: 16) states, "obviously, to retain students by helping them make the most of their college experience, a good start is necessary." An orientation program, therefore, provides an important element in quality education.

Two investigations by Kirk and Dorfman (1983) and Sands and Richardson (1984) examined the influence of psychological predictors for satisfaction and found that for adult women the lack of conflict in academic involvement, positive faculty-student relations, advanced academic standing, helpful collegiate services and support, support of family and significant others, moderate work involvement, and positive public attitudes toward their reentry were important predictors of success. Cohen and Jody (1978) reported that students drop out for many nonacademic reasons that a college cannot be expected to prevent. However, the confusion regarding college expectations can be clarified. While Barry University's new student orientation cannot address nor control all of the factors that are predictors of success, an attempt is made to alter many of their fears. The purpose of providing orientation to new students is to assist them to function fully, intelligently and profitably in the college community (Ross, 1975).

Adult learners also bring to the college experience a variety of personal issues having to do with life transitions that add to the experience of stress (Chickering, 1969). While no institution of higher learning can address all of the problems faced by students, evidence exists that retention can be enhanced through an orientation program (Gordon and Grites, 1984). Attrition rates have been the subject of research for decades. The unique problems of adult learners present difficulties for institutions to address. Creamer (1978) shows that many institutions find it difficult to attract students to orientation programs that occur before classes begin.

Houle (1961) identified three factors for adult learners: goal orientation, activity orientation, learning orientation. Willner (1979) found that serious deficiencies exist in study skills, uncertain academic expectations, and a general lack of sophistication regarding college procedures and requirements. He reported that by offering orientation, students demonstrate positive effects on various measures of student adjustment and performance, in addition to better rates of retention. Cohen and Jody (1978) also report that orientation increases student retention, while it fosters students' use of resources and reduces trial and error behavior. Costly administrative time is also reduced. It is one goal of Barry University's new student orientation to address the factors inherent in students reentering the academic community in order to reduce attrition.

Program retention in education has several measures: (1) goal accomplishment (i.e. credits toward teacher certification and recertification); (2) degree completion; (3) completion of credits for transfer to another institution for earning a degree; and (4) sampling of the higher education menu. Program/degree completion with Barry University means completing all requirements without stopping out for more than a two-year period. Should that occur, a student must reapply and subsequently comply with all the new degree requirements. It is our assumption that our new student orientation reduces that occurrence.

Brimline and New (1975) state, "In recent years, the [orientation] seminar has been criticized by both faculty and students largely because no attempt was made to evaluate its effectiveness." More studies are found that support the need to determine the effects of student behavior on orientation programs before resources are expanded to include such offerings. Such measures as grade point averages and persistence toward reaching educational goals may be indicators of the success of an orientation program.

Survey Results

An informal survey of 12 institutions with non-traditional programs was conducted to first determine if a new student orientation was held; second, if so, topics covered and time involved; and third, its relationship to retention. Three variations occurred: (1) there was no orientation; (2) there was a one-hour-plus cursory overview of the institution; and (3) in institutions where the majority of the degree is through correspondence and independent study, a required three credit hour course was held during which the portfolio process was explored and, in fact, completed so that the results were made known to students in a timely manner. None of the institutions had statistics available on a correlation between new student orientation to retention. Yet that correlation has been found at Barry University particularly at one location.

In an effort to study the effects of an orientation program on successful academic progress and persistence toward completion for Barry University students enrolled in the School of Adult and Continuing Education, student performance was evaluated for those students who attended orientation at the beginning of each term in the fiscal year 1990. The student population studied was located at an extension site on the east coast of Florida that serves a four-county area called the Treasure Coast. Each term, from thirty to fifty new students enroll in the School of Adult and Continuing Education in two non-traditional degree programs.

During the year 1990, two orientation sessions were held for new students just before a regularly held faculty meeting; two orientation sessions were held just before a regularly scheduled Portfolio Seminar. The purpose of trying different schedules was to discover whether or not attendance would improve when students could meet faculty, or when they could save time by scheduling orientation in conjunction with a required seminar. The following table shows the number of new students, the number who attended an orientation seminar, and the type of session held in conjunction with orientation.

NUMBER OF NEW STUDENTS WHO ATTENDED ORIENTATION
AT THE TREASURE COAST SITE

Term	New Students	Attended Orientation	%	Other Meeting
Winter 1990	28	8	28	Faculty
Spring 1990	39	11	28	Faculty
Summer 1990	[illegible]	7	23	Portfolio Sem.
Fall 1990	46	12	26	Portfolio Sem.

Table 1

The evaluation showed that a mean of 26% of the students who enrolled each term attended the orientation session. Of that number, 17% are no longer enrolled. Of the 74% of the new students who did not attend the orientation, 34% are no longer enrolled. Many of the students who are not currently enrolled may indeed plan to return, but sufficient time has not yet elapsed to know. We are continuing efforts to monitor the progress of students who attended the orientation session, and those who did not.

A larger population of students enrolled in the School of Adult and Continuing Education is found at the main campus in Miami, Florida. Each term, an orientation session is held before classes begin for new students. An evaluation form is distributed to participants at the close of the session. Comments regarding the program content are solicited. The most negative comment found was that one of the speakers read from notes. For the most part, students appreciate the opportunity to learn more about each other, the University and the ACE program. The program is held at the University's main campus, so representatives from Student Services, Career Development, Learning Resources, and the advisors are present and a tour of all of the facilities is available.

Model Orientation

Each of the above orientation sessions has a different format and content because of the availability of human and physical resources. At the extension site, the Director is responsible for conducting the session; and since classrooms are located at different sites throughout the community, no tour would be done. The subjects on the agenda at the Treasure Coast include: memory and retention, self-directed learning expectations, study and writing skills, University policies and procedures, social engineering (time and stress management), and the effective and efficient use of limited resources. Packets of materials are prepared and distributed.

The orientation provides an opportunity for new students to meet each other so that peer support groups may be formed. Further, students meet some of the faculty in a non-threatening setting, thereby establishing a mind-set toward faculty of friendly helpfulness. Goal setting is addressed from the view of establishing course schedules to achieve success. The content and process of the portfolio, through which academic credits are awarded toward the degree, is discussed with students who are urged not to procrastinate in starting the process. Stress management techniques and the importance of family cooperation are included. An introduction to library materials eases the trauma of writing that "first" research paper. Establishing short term priorities as a part of the students' long term goals, and how those must fit the mission of the institution are presented. Theories of adult learning are briefly discussed so that new students know that we know they learn best by doing and by seeing how that learning meets their needs now, that there are various learning styles and in a classroom all need to be addressed to maximize learning for all.

Summary and Conclusion

The purpose of providing an orientation session to new students is to make the transition from other pursuits to the classroom successful. The ability to persist and succeed in a non-traditional program that requires a great deal of self-directed activities and learning may very well rest on the first step, the first class, the first term.

A review of the literature has substantiated the need for orientation of new students. However, it is evident that many schools provide such a service but have not addressed the need to evaluate the programs in terms of their value to students nor their value to the institution, particularly with regard to retention.

The School of Adult and Continuing Education at the Treasure Coast site has attempted to begin the evaluation process of the results of offering orientation. Content and format must continue to be examined, as well as the appropriate time to offer orientation. More importantly, the School will need to continue to monitor the progress of those students who have taken the opportunity to "step off on the right foot" as opposed to those who did not.

Barry University's general purpose "is to offer quality education, to assure religious dimension, and to provide community service and presence within a more caring environment." The orientation is one way we strive to achieve our mission of caring and community service. Quality is controlled through our extensive evaluation processes and on-going communication. Managing change becomes a challenge for non-traditional educators as they strive to diminish dangers and increase opportunities. Both the student and the institution benefit.

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SELECTED ACADEMIC AND DEMOGRAPHIC CHARACTERISTICS OF A BACHELORS COMPLETION PROGRAM FOR ADULT LEARNERS

Keith Harman
Lynette La Hay

Introduction

The purpose of this study was to present a partial "profile" of adult students who completed their bachelors degrees via National-Louis University's (NLU) Field Experience Program. This study was conducted and prepared in November, 1989. Data on eleven key variables: students' admissions status, type of IHE (institution of higher education) attended immediately prior to admission to NLU, age, ethnic origin, gender, occupation, marital status, writing sample results, years since last college attendance, zip code, and employer. This descriptive study was based on a census of a population of 185 students at NLU's Academic Center in St. Louis, Missouri. The 171 students whose files were examined (14 student files were not available) represented the members of thirty- one BA Completion Program Groups, SL01 through SL 31, which participated in NLU's Field Experience Program (BA in Management) during the period, 1984-1988.

Data for the study were collected from admission application documents and writing sample documents. The analysis of the data included frequency counts, calculation of "raw" and "adjusted" percentages (in order to account for student files that were not available) and computation of summary statistics.

The study yielded a partial or preliminary "profile" of BA degree completers at the St. Louis Academic Center: a 37-year-old white male in an administrative or managerial job who fully met NLU's admissions criteria and who last attended a four-year institution. This individual was married and successfully passed the writing sample on the first attempt. He had also been away from an institution of higher education for one year or less and might live anywhere in the St. Louis city or county and work in any kind of organizational setting. It was concluded that BA degree completers at the St. Louis Academic Center possess academic and personal characteristics highly similar to "typical" adult students who persist and eventually achieve their undergraduate degrees.

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Background

Purpose of the Study

This part of the report is focused upon the purpose or rationale for the study and the design of the study. Discussion related to the purpose or rationale for the study includes examination of the practical and scholarly issues addressed by the study. Discussion of the design of the study involves the following topics: population and sampling, levels of dependent and independent variables, data collection, and data analysis.

The purpose of the study was to identify key academic and demographic characteristics of students who completed a bachelors degree via NLU's Field Experience Program. From a practical standpoint, the study is intended to yield information which might be used to enhance the completion rates of students in the Undergraduate Field Experience Program (BA in Management). Additionally, the study is intended to yield data which might be used to shed light on scholarship related to the persistence of adult learners.

Aslanian and Brickell (1980) report that age, ethnic origin, gender, prior participation (college hours previously earned), occupation, and type of IHE (institution of higher education) previously attended are factors associated with adults' persistence in completing undergraduate degree programs. Findings from a study by Sommer (1982) indicate that age, gender, and occupation are associated with adult students' persistence. Graham (1986) reports that age, gender, occupation, and prior participation (previous college credit earned) are linked to adult students' persistence. Age, gender, and previous college credit earned are factors cited in a study by Nielsen and Milkman (1982). Pirnot (1987) provides data indicating that age and gender are linked to adult students' persistence.

Those previous studies provide a "profile" of the adult student who might be described as a "completer":

- a white male 35 to 45 years of age;
- engaged in an administrative or managerial occupation;
- who previously attended a four-year college;
- and had previously earned 50 to 75 semester hours of college credit.

Consequently, eleven key variables - age, ethnic origin, gender, occupation, previous college credit earned, type of IHE previously attended, writing sample results, years since last college attendance, marital status, zip code and employer provide the various "types" or levels of the two independent variables for this study: academic characteristics and demographic characteristics.

Study Design

Population and sampling. The study entailed a census of all students who had completed their bachelors degree via NLU's Field Experience Program (BA in Management) at the St. Louis Academic Center. Only 177 of 186 complete student files were available. The 177 files, however, represented 95% of the population and were deemed to constitute a census of the "accessible" population (Churchill, 1987).

Levels of dependent and independent variables. The study was a bivariate, descriptive study. There was one level of the dependent variable: persistence or completion as measured by graduation from college. The independent variable, student characteristics, had two levels: academic characteristics (admissions status, type of IHE previously attended, writing sample results, and years since last college attendance) and demographic characteristics (age, ethnic origin, gender, occupation, marital status, zip code and employer).

Data collection. Data were collected via perusal of student files which contained admissions application information and transfer credit evaluations. The files were perused by the authors from September, 1989 to November, 1989.

Information on students' admission status was recorded according to the following categories: "full", and "provisional on the basis of not having the minimum number of transfer credits." Data on the type of IHE students attended immediately prior to enrollment at NLU were coded as "community college", "junior college", "four-year school", or "technical school". The age of each student was recorded and those data were later coded on the basis of the following age groups: "20- 25", "26-30", "31-35", "36-40", "41-45", "46-50", or "51-55". Gender data were coded as "female" or "male". Data related to the students' ethnic origins were placed in the following categories: "American Indians", "Asian", "Black", "Hispanic", or "White". Occupational data (job titles) were categorized as: "administrative/managerial", "engineer/technical", "sales/marketing", "clerical/secretarial", "scheduling/transportation", "finance/accounting", "production/inventory control", "maintenance/repair", "educator/trainer", "unemployed" or "self-employed".

Information on students' marital status was recorded according to the following categories: "married", "divorced", "single", "separated", "widowed", and "?" (information not available in files). Data on the writing sample was coded into these areas: "passed", "failed", "rewrite required" and "?" (information not available in files). The information regarding years since last college attendance was recorded from the admissions application. Results were rounded off to whole numbers (years). Data regarding zip code and employer were recorded from the admissions application.

Data analysis. Frequency counts were conducted and percentages were computed for the various categories per level of independent variable. The "raw" data for students' ages were used to calculate summary statistics. Age data were also coded and the frequency counts and corresponding percentages for each code were computed. Measures of central tendency were computed for the years since last college attendance. Only the top ten zip codes were listed. However, frequency counts were done on all of the files. The top seven employers were listed. However, frequency counts were done on all employers listed in the student files.

Findings

Academic Characteristics

Admission status. Almost four out of five completers met the requirements for full admission to the BA Completion Program. The data further infer that provisional students who have a low grade point average (gpa) are about three times as likely to complete as students who have a low number of transfer hours (27 low gpa completers versus 10 completers who did not meet admissions criteria for prior college credit earned). Additionally, the data infer that fully admitted students are almost four times as likely to complete as are provisional students (140 fully admitted students versus 37 provisional students).

Type of IHE previously attended. The data indicate that roughly one-half of the students (46% or 82 out of 177 cases) attended a four-year school prior to enrolling in NLU. Almost one-third of the students (31% or 55 out of 177 cases) attended a community college prior to enrolling in NLU. About one-fifth of the students (19% or 35 out of 177 cases) attended a junior college prior to enrolling in NLU. Thus, a little over three-fourths of the students (77% or 137 out of 177 cases) attended a four-year school or community college.

Writing Sample Results. The data indicated that 71% of the students passed the writing sample on the first attempt. Only 2% of the students failed the writing sample. Eight percent of the files surveyed did not contain the writing sample results. This statistic, along with the 8% of files not available for viewing, constitute a total of 16% of the writing sample results not available for analysis. It can be inferred from these results that the vast majority of students who successfully complete the bachelors field experience program possess strong writing skills.

Years Since Last College Attendance. The data indicates that students wait an average of just under 8 years (7.88) before starting NLU's field experience model. The mode was 1 year. This statistic indicates that many students waste little time in enrolling in the bachelors degree program at NLU's St. Louis Academic Center. The range of years students waited was a wide one - up to 28 years. Fifteen percent of the students enrolled immediately in NLU's bachelors program upon completion of coursework at another institution.

Demographic Characteristics

Age. Over one-half of the students were between 36 years of age to 45 years of age. Persons aged 20-25 and 51 to 55 made up the smallest age groups. The typical completer was 37 years of age.

Ethnic origin. White students comprised ninety percent of the cases, Blacks, about ten percent. The typical completer is a white person, but white may be over-represented.

Gender. A sizeable majority of completers are males. Consequently, the typical completer is a male.

Occupation. A little under one-half of the students (86 out of 177 cases) belonged to the "administrative/managerial" category. A sizeable number (16% or 29 out of 177 cases) belonged to the "engineer/technician" category. Thus, the typical completer was an administrator or manager; often with a technical or engineering background.

Marital status. Sixty-five percent of these students were married at the time of degree completion. It can be inferred that these student represent a more "rooted" population. Whether this aids in completion of an accelerated bachelors completion program is not apparent from the data. The smallest statistic was represented by the category of widowed. Only 4% of the files did not carry information about marital status.

Zip code. All zip codes in the student files were tabulated in the raw data. The geographic area represented by the zip codes covers a wide area. This area includes St. Louis city, St. Louis county (west, northwest, north and south) and areas south of St. Louis county. No one geographic area took precedence.

Employer. All employers listed in the student files were recorded in the raw data. Two large telephone companies accounted for a total of 20% of the student population. Other types of organizations represented included a large brewery, a state and federal branch of government, a major insurance company and a major chemical company. Other employers listed in the raw data also represented a variety of organizations.

Conclusions and Recommendations

Conclusions

Completers at NLU's St. Louis Academic Center generally fit the "profile" which emerges from the scholarly literature on the persistence of adult learners. The typical completer is a 37 year-old white male, who works in an administrative/managerial occupation, has at least a 2.00 GPA and 50-75 quarter hours of transfer credit, and attended a four-year school prior to enrolling in NLU's Field Experience Program. The typical completer is also married, has passed the writing sample on the first attempt and might live anywhere in St. Louis city or St. Louis county (or south of St. Louis county). The student may be employed by almost any type of organization.

Recommendations

Given that completers at the St. Louis Center fit the profile in the scholarly literature, it is logical to assume that generally-accepted methods of recruitment and retention of adult students may be applied in the St. Louis Academic Center. Additionally, logic dictates that the University would be wise to "target" its recruitment to persons who fit the profile of a completer. It is also recommended that marketing efforts cast a "wide net" geographically and organizationally for students who will be successful completers. Individuals still enrolled in classes at area higher education institutions should be targeted since many completers waited one year or less before leaving another higher education institution and coming to NLU's St. Louis Academic Center. A study should also be undertaken to gather data on a) students who take advantage of tuition reimbursement programs with employers and b) the level of referral by former students to the bachelors program.

Additionally, there is a need to explore variables which may be used to identify "at risk" students. Such efforts would enhance the scholarly literature on adult learner persistence and offer potentially rewarding information on the retention of students in NLU's Undergraduate Field Experience Program in St. Louis.

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CREATING A NON-TRADITIONAL DEGREE THAT WORKS

Robert B. Leiter

Introduction

It was early August and Mable Farnsworth (a pseudonym) had made a giant step in her life. Mable, a 45-year-old single parent, decided to return to college. It had been over 20 years since she attended a community college in her hometown. It was a daring and traumatic effort, but she mustered the courage and entered the admissions office of a university.

Several scenarios could follow. She could be met by a non-sympathetic admissions person. In this case she would be told that she was a little old for college, but she could fill out a long application and numerous other superfluous forms and make visits to four other offices. The Admissions Committee would review her credentials and contact her later. A second scenario, which we hope is becoming more common, starts off the same way. The difference is that Mable is met by an empathetic, understanding admissions person who listens to her situation. She is then referred to the Adult Student Services office where she is greeted by a trained professional continuing educator. The conclusion of the first scenario is, all too often, a dejected, potential student leaving with a negative impression of the institution, never to return to higher education. The second scenario provides the guidance, counseling and positive environment for the institution to provide a service to a potentially gratified alumnus.

In the next few pages we will examine background, types of degrees, and models that can make the second type of scenario become a reality.

History and Demographics

Historically education can be divided into three eras. The first period, beginning around 1870, focused on a standard curriculum marked by liberal education and patterned after European models brought to this country by our forefathers. The second era, running into the 1960's, concentrated on what is referred to as new knowledge and human capital, breaking away from liberal education. The third era, the era of

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consumerism, is where we find ourselves today. Today's education has moved from the elite to the masses and universal access. America is deep in the midst of this third era.

As we have moved into the information age society, access to information and technology have forced a re-evaluation of where we are and where we are going. This is true in every sector of our society. We have been hit with a "data storm" from every direction. This "data storm" has dramatic effects on higher education, as pointed out in the following information from the College Board and reported in the USA Today, October 17, 1989.

"The number of adults attending college is growing fast. Between 1970 and 1985, enrollment of students over age 25 grew by 114 percent, compared to a growth of 15 percent for those under 25. By 2000, adults are expected to outnumber the most traditional-age college students."

The College Board information is reinforced by a recent publication by the National University Continuing Education Association, "Lifelong Learning Trends". They pointed out that:

- Between the years 1965 and 1989, the number of part-time student enrollments in American colleges and universities almost tripled, growing from just under 2 million to almost 6 million.

- Between 1970 and 1989, part-time enrollments increased by 109 percent, compared to 32 percent for full-time enrollments.

- One-third of all undergraduate-level enrollments are part time.

Numerous reasons account for the success of the new era in education. Technology and information availability are contributing factors. Employees are requiring more training and retraining for their employees. Other factors include women re-entering the work force, the greying of the American population, and adults feeling more confident and academically prepared for personal growth and development.

Non-Traditional Degrees

This takes us back to Mable Farnsworth's situation and the thousands of people like her. Many institutions have looked at the demographics, examined their social consciences, as well as their futures, and decided to rethink their educational programs.

In the 1970's early leaders were Antioch College and Goddard College. They were followed by others like the University of Mid-America out of the University of Nebraska, Minnesota Metropolitan State College and Empire

State College of the State University of New York System. These early pioneers and innovators were often seen as mavericks in the eyes of traditional educators and institutions. History now shows that they were indeed leaders into a new era. American education has moved from an age of skepticism to one of acceptance at most institutions. Many institutions have implemented a form of non-traditional programming into their systems. These run from special admissions to Bachelor, Masters and even Doctoral degrees.

Mississippi State University developed an approved BGS degree in 1979. The degree originally met with considerable opposition from a variety of areas on the campus. The degree remained basically dormant for 10 years, when in 1989 the State Board of Institution of Higher Learning decided to implement a special educational program for the Mississippi National Guard. The BGS model was pulled off the shelf and used as a state-wide model. Through the Mississippi Military Education Institute, member institutions provide the mechanism for National Guard personnel to take courses leading to a Bachelors degree.

Courses are taught by instructors approved by the Policy Committee of the Institutions of Higher Learning. Once an instructor has been approved to teach at one institution, the instructors will be approved to teach the same course at all participating institutions. Grade reports are submitted by the instructor to the coordinating institution. The coordinating institution is then responsible for distribution of official grades to the students' chosen institutions and appropriate National Guard officials.

Students may accumulate credit through the Military Credit Assessment Center, transfer credit and other non-traditional methods as well as take courses provided by the Mississippi Military Education Institute participating institutions.

Bachelor of General Studies Consortium Model

Each institution throughout the country is unique and has special audiences it serves. At the same time there are models that can be used whether an area is rural or urban, public or private, large or small, because even with the autonomy, there are still similarities.

The following is such a model. It is a transferrable model and even though names are used for clarification, it is suggested that you think of your institution and implementation procedures for your particular situation. The Bachelor of General Studies degree is designed primarily for the adult student whose life goals include a college degree, but whose career would be better served by a non-traditional curriculum. All minimum University requirements apply, all core curriculum courses must be taken and the residency requirement fulfilled, albeit in different ways. Degree proposals submitted by the student, and at least two sponsoring faculty, are reviewed and approved by the General Studies Standing Committee, before the students senior year.

In the BGS Consortium Model the Vicksburg Consortium was already in existence to serve certain educational needs in the area. Members include Mississippi State University, Hinds Community College, Alcorn State University and an ex-officio member, the Vicksburg Waterways Experiment Station of the Corps of Engineers. Many people in the area are place bound and not able to travel to universities to complete degree requirements. In assessing needs, many of the people, especially those at the Vicksburg Waterways Experiment Station who work in computer-related jobs, need further education in computers but not to the extent of a degree in Computer Science. Thus emerged the BGS with a concentration in Computer Science. The lower division courses are the responsibility of Hinds Community College. The upper division courses are taught by appropriately approved faculty from either Alcorn State University or Mississippi State University. Students have their choice of applying credit to either ASU or MSU and the courses are considered in residence.

As shown on the outline that follows, sixty-four (64) hours are taken at the lower division which includes the core requirement. The upper division can consist of three 12-hour areas or two 18-hour areas. This leaves the student with 28 hours of electives. The student completes the BGS with the 28 hours required for graduation from either ASU or MSU.

It is anticipated that in Vicksburg the majority of the students will select the BGS with a concentration in Computer Science as indicated by the needs analysis. The more important issue is that the model can be taken anywhere and the areas of possible concentrations are limitless.

GENERAL STUDIES
BGS

Lower Division

Communication			
English Composition		6	
Speech		3	
Humanities/Fine Arts			
Literature		3	
History		3	
Art/Music/Theater Appreciation		3	
Social and Behavioral Sciences			
Sociology, Psychology, Political Science (or) Economics		6	
Lab Sciences			
Biology (or) Chemistry (or) Physics (or) Geology		9	(or 6)
Mathematics			
College Algebra and above		6	(or 9)
Major (General Studies Core)			
Additional Courses selected from University Core Curriculum (including 3 hours literature or history)		15	
Other			
Electives (including computer literacy, junior/senior writing)		10	
Lower Division	SUB TOTAL	64	

Upper Division
(32 hours in residence, Vicksburg Consortium)

Concentration area		36
Twelve-hour areas (3) Eighteen-hour areas (2)		
Electives		28
Upper Division	SUB TOTAL	64
	TOTAL	128

Summary

The previous pages have provided information on changes that are continuing to occur in higher education and with student populations at our institutions. The Mable Farnsworths mentioned earlier will be demanding more and more consumer-oriented education as we move to an increasingly aging population. These are exciting, challenging and rapidly changing times in higher education and the opportunities are right for providing new pathways and opportunities for our clientele. All of us in higher education have the challenge and the opportunity to meet the educational needs of our new clientele.

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THE ENNEAGRAM--A CELEBRATION OF DIVERSITY

Catherine M. Rodefer

Introduction

The word enneagram comes from the greek word "enneas" which means "nine". The Enneagram is a personality theory combining the insights of modern psychology with the proven wisdom of ancient philosophies. The enneagram presents nine basic personalities, each with its own set of observable characteristics.

For those of us in continuing education, the enneagram can be a powerful enrichment and self-discovery tool. It can be offered as a workshop for personal growth, as an in-service for professional development, or even as a corporate seminar for maximizing each person's human potential.

This paper gives a brief introduction to each of the nine personality types. It is important to remember that this is not a "stereotyping" or "labeling" system, but an attempt to discover one's unique gifts and talents. The motivation for one's behavior plays a key role in discovering enneagram type. There is no "best" or "worst" type, and self-identity is the most valid method for discerning one's type. The nine different types can best be examined in three groups. These groups are based on our three centers of operation: the heart center, the head center and the gut center. Although all three centers are present, and should ideally function interdependently in everyone, one is predominant in each personality type. As each type is described, search for a clue or pattern that seems to fit with your own behavior. Remember also, that it is necessary to exaggerate the compulsion in order to truly distinguish each type. Refer to Figure 1 to examine the enneagram symbol, the arrangement and identification of types and their gifts.

The Heart Center

The heart center functions on the level of feeling and focuses on the other. The heart center is predominant in enneagram types Two, Three and Four. Activities associated with the heart center are emotions, sympathy, and relational wants, needs and desires.

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#2 The Assistant

The Two is the person who truly "needs to be needed". The essence of the Two's life is to be helpful, and this is often shown in spontaneous and generous responses to the needs of others. The Twos will focus on a friend's favorite things so as to know what to serve, what to wear or what to do. Of course, the Two wants to be appreciated, and you are expected to notice this extra effort. The Two is usually warm, personal and eager to give advice and flattery. Twos make you feel as if nothing is too much trouble, but often have a way of sneaking in a comment that will let you know just how much they have done for someone.

Relationships are extremely important to the Two. A Two might feel that "you should like me because I have done so much for you". However, Twos can become so preoccupied with meeting the needs of others that they repress a recognition of their own needs. Many Twos choose a career in a helping profession such as social work or health care.

#3 The Administrator

The Threes of the world are focused on success, on being members of the winning team. They are very goal-oriented and have a highly persuasive communication style that can motivate others to share that goal.

The value of a Three's life is measured in terms of success, and so they avoid failure at all costs and tend to become involved only with projects that have a good chance of succeeding. Image is extremely important and even small failures can be seen as monumental. They tend to "dress for success" and often choose a profession where they can "run the show". They are usually enthusiastic, animated and energetic, but can also be perceived as insensitive to the feelings of others because all their attention is directed toward the objectives. Having a Three on your committee is like having a "tiger in your tank."

#4 The Author

The term "author" here is used in a broad sense--it refers to the kind of person who can write new words on the pages of life. The Fours are those truly unique individuals who often seem to "walk to the beat of a different drummer."

Things must always be "special" for the Fours, and they assiduously avoid whatever is ordinary. They usually have a highly developed aesthetic sense, and this is reflected in their environment and their dress. They can get away with wearing outrageous things because they seem to "fit" the Fours.

Fours perceive themselves as being different from everyone else, and so no one could ever really understand them. They "sigh" a lot and are sometimes described as tragic romantics. They tend to relive the past and often dramatize their feelings. They have very compassionate hearts, but are not easy to get to know because they are so protective of their private space.

Being around a Four can heighten another's sense of beauty. The Fours often become poets, musicians, actors and artists.

The Head Center

The head center functions on the level of thinking and reflecting. Activities associated with this center include analysis, logic, creative imagination and fantasy. The head center is predominant in enneagram types Five, Six and Seven.

#5 The Sage

The sage can never know enough, and so the Five is like a giant informational sponge that takes everything in and stores it for analysis and synthesis. Fives often withdraw into themselves and can become totally absorbed in a project. They are much more observers in life rather than participants.

The Five shows little emotion and often wears a "never know what I'm thinking" face. However, while aloof on the outside, Fives can be feeling deeply on the inside. They treasure their time and privacy and are often seen as loners and scholars. Because of this they are often uncomfortable in social situations and poor at "small talk."

Despite all the "treasures within", Fives's are often perceived as stingy. They are reluctant to share knowledge and information since this leaves them feeling empty.

#6 The Facilitator

Sixes have a high sense of membership and responsibility. They excel in hospitality and make everyone feel welcome by doing what is appropriate in each situation. Sixes are great committee and team members and are very loyal to the community, the church, the job, the family. They need to know the rules and are always trying to live up to everyone's expectations.

Always mindful of authority, Sixes avoid deviating from the accepted norms. They often feel insecure, and they are reluctant to try what is new and different. It's important to make the right decision, so Sixes's are cautious and lack confidence in decision-making skills.

Although Sixes are not self-starters, they are hard workers and always follow through. They will dress and act appropriately, are dedicated and conscientious.

#7 The Optimist

The optimist looks at the world through "rose-colored glasses" and sees the good in everyone and everything. Sevens have highly developed imaginations and usually envision endless opportunities and possibilities. They are enthusiastic and energetic people who are most likely perceived as "the life of the party."

The Seven tries to please all of the people all of the time, and is very hurt when this doesn't happen. Any situation that is painful is to be avoided, thus Sevens do not deal well with conflict, but tend to escape into fantasizing the good times ahead instead of dealing with the unpleasant reality.

Sevens are great planners with a "more the merrier" philosophy. In fact, Sevens always tend to overdo everything, and find it hard to cease whatever gives them pleasure. However, if things get difficult, or boring, the Seven might quit one project and pursue something more appealing. Sevens tend to be late, but always have lots of excuses because of trying to fit in everything.

The Gut Center

The gut center operates in the realm of instinct and habit. It is concerned with "being" and "self-existence" and is predominant in enneagram types Eight, Nine and One. Activities associated with this center are spontaneous reactions, physical coordination, memory, will power and acting on instinct.

#8 The Champion

The champion is one who crusades for what is right and honorable, and will not hesitate to take on the whole power structure for a just cause. Eights are straightforward and blunt in communication style, so that you know exactly where you stand. If an Eight likes you, you have a friend and defender for life, whereas if an Eight doesn't like you, you simply don't exist because you're not worth the time or energy.

Eights are perceived as powerful and intimidating. They avoid any show of weakness and need to feel in control. They never hide their dissatisfaction and are always ready for confrontation.

Eights have abundant courage and energy which can be directed toward work or play with equal zest. They do not fear rejection, nor do they care what others think. They wear and do what they want and everyone else is likely to accept it.

#9 The Negotiator

The Nines are the peacemakers of life. They avoid any kind of conflict and attempt to restore harmony as quickly as possible. They are natural arbiters and are very good in bringing about reconciliation.

Nines are stable in crises and have exceptional survival skills. They like to keep everything flowing smoothly and are seen as incredibly laid-back and easy-going. The nine is always "ok". In times of stress, the Nine digs in and rides out the problem no matter what. There is an underlying stubborn streak that causes the Nine to not give in and not give up.

Nines can become true "couch potatoes" and are prime television addicts because there just isn't anything worth getting really excited about. They usually have a very calm exterior with very little display of emotion, and anything you might want to do is "ok" with the Nine.

#1 The Inspector

The world's quality control people, Ones examine everything critically and carefully. They are hardworking and expect everyone else to be. There is a right and correct way to do everything - the One's way!

Ones are always striving for perfection. They are meticulous in housekeeping and personal grooming. Sloppiness is never to be tolerated. Ones become angry when the world is not as it should be and people are not living up to their standards, but try to cover up this anger because they see it as a flaw. When the anger is expressed, it often erupts with terrible ferocity.

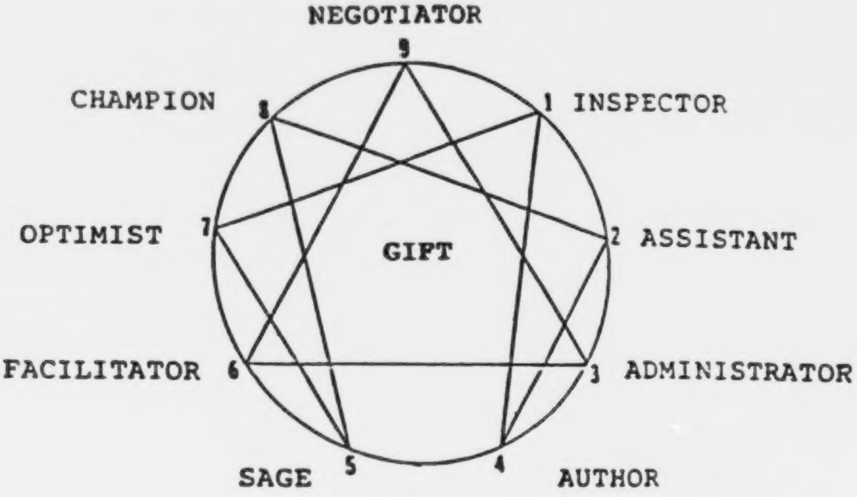
Sticklers for detail, Ones notice everything and are constantly inspecting for error. They are generally dissatisfied about something and often communicate this indirectly by body language or an edge to the voice.

Ones are honest and direct and can be counted on to get things done.

Conclusion

An understanding of enneagram insights can enhance interpersonal relationships on many levels. It allows us to recognize our own perspectives as well as those of others. It opens an individual to other possibilities and options for negotiating difficulties and encourages us to explore these options. Finally, in a world that is filled with diversity, and yet so interdependent, the enneagram leads us to reverencing these differences and respecting each individual's unique contribution to the good of the whole.

Figure 1


NEGOTIATOR
9
CHAMPION
8
1
INSPECTOR
OPTIMIST
7
GIFT
2
ASSISTANT
FACILITATOR
6
3
ADMINISTRATOR
SAGE
5
4
AUTHOR

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Endnote

The material presented in this paper is a compilation of information gathered from the workshops and publications of Maria Beesing, O.P. and Patrick O'Leary, S.J. Beesing and O'Leary are based in Cleveland, Ohio and are internationally acclaimed experts on The Enneagram.

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COALITION FOR CHANGE: CONTINUING EDUCATION AND THE OLDER LEARNER

Carolyn Zane Vaught

Introduction/Abstract

While many college and universities today are actively encouraging senior citizen attendance---either through reduced or waived registration fees, the response from older adults has been generally less than enthusiastic. The reasons for this are various, but primarily involve the difficult adjustment to traditional academic schedules and lack of social interaction, especially with peers. Considering the rapidly growing number of older adults in our society, with an increasingly higher percentage of them having some college background, it is inevitable that the nature of programs provided by continuing and alternative education divisions will need to reflect this change.

The success of organizations such as Elderhostel can provide useful examples: its phenomenal growth and increasing program diversity attests to the desire of older adults for challenging academic experiences. However, many adults express a need for local (non-residential) programs---either in addition to or instead of---the travel format of Elderhostel. Learning-in-retirement programs are becoming popular because they promote a sense of community and a political network of support for older adults. Problems encountered in these programs are often unique to this age group, but surmountable through sensitive planning. The varied rewards to the institution, the community, and the individuals involved are immeasurable.

Us versus Them

For a while it seemed that every article on the topic of older learners began with a barrage of statistics: the 65-and-over population in the U.S. is now 11% and expected to reach 20% by about the first quarter of the next century; the average lifespan is currently 78.6 years and climbing, while the retirement age remains anchored at 64, and is if anything being nudged downward; and when 70 million baby boomers finally cruise into the twenty-first century, it will be their AARP membership cards as well as their American Express cards that they won't leave home without.

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Close on the heels of such evidence in these articles came the warning, sometimes dire, and other times offered in Boy Scout earnestness: **Be Prepared**. Frequently the articles' authors urged "needs assessment" by educational institutions and "program development," and usually cautioned that "flexibility," would be needed. One urged that educators and staff acquaint themselves with the history of motivational theory and the elderly and suggested a number of reference works. Several referred to Maslow's classic hierarchy of needs. Although the majority of these articles tend to scrupulously avoid the tone of condescension that pervaded some earlier writing, a disturbing sense of distance, alienation, or dissociation nevertheless emerge. "What are we going to do about 'them'?" they seem to ask, as if "they" were a swarm of advancing killer bees or visitors enroute from Mars. We have been slow to accept the truth we learned from the Pogo comic strip of the '60s: "We have met the enemy and he is us." Or, more accurately, he is what we will be.

The first step, then, in discussing the inevitable changes occurring or soon to occur in continuing and alternative education is to recognize that aging is the natural progression of life and learning---continuing education at its most literal level. The people we deal with will reflect important changes in our society: one third of our population will be non-white; presently half of the over-65 age group has a high school education---the baby boomers can be expected to boost this number significantly; and, some of us can look forward to spending almost as much time in retirement as we have spent building our careers. Still, "they" will always be "us," with the same fundamental needs and desires. We don't have to be 65 and retired to realize that as much as we may want to believe it, retirement will not be one long paid vacation. Those of us with fast-paced, demanding careers may be relieved to walk away from the day-to-day stress, but it will be extremely difficult in most cases to shut off our drive for accomplishment, recognition, and a need for control. We may alter our situations when we retire, but not our personalities.

While basic education and career training must remain an important part of continuing education programs---not all of us, after all, will find retirement an option, especially when faced with economic hard times and a dwindling social support system---making life meaningful beyond the eighteenth hole of the golf course will become a primary challenge for those involved in planning for the future of continuing education.

Inverting the Pyramid

I have consciously refrained here from using words like "client," "customer," and even "programmer," and "administrator." And when I speak of "those involved in planning for the future of continuing education," I am intentionally vague, because I anticipate that the most dramatic change in our field over the next several years will come in how we view our relationship to the community we represent and with which we collaborate. The very language we use in describing this relationship will, and must, reflect this change.

Paulo Freire, in his work with and writing about literacy programs in Brazil, has influenced progressive educators and altered perceptions of the fundamental teacher-student relationship, and in a larger, more political sense he has altered our understanding of the motives and methods of those who presume to educate others. His work has serious implications for continuing and alternative education. Now is the time for us to reevaluate our goals and how they may best be accomplished.

The relationship between continuing education staff and participants in their programs has traditionally been an authoritarian one. An understandable, if unflattering, reflection of our educational system in general and our more recent penchant for emulating the organizational and managerial styles of business. In a manner similar to Freire's, Susan J. Kannel of Adult Learning Services in Greely, Colorado, has examined this "closed-system, top-down managerial approach for solving human problems," in her sensible and sensitive article, "Program Planning for the Future."[1] What we need and will eventually arrive at instead of such an organizational system, she maintains, is a bottom-up, grassroots approach that relies not on implementing models, but on facilitating processes for generating---and sustaining---programs.

Along with our authoritarian inclination, educators and administrators have held fast to a paternalistic view of education. While this might be justified when dealing with students we now label "traditional" (i.e., younger than we are), for whom we can assert, although not always demonstrate, that we know what is best, this attitude loses what credibility it may have had when we begin to dictate to peers and elders.

For a number of years now, universities and colleges have permitted senior citizens to attend courses with either full or partial tuition waivers, on a space-available basis. These same institutions have expressed surprise at the minimal response this offer has generated. As Freire has pointed out, however, programs fail when they are designed by those who do not participate in them and whose goals, expectations, and vision of reality differ from those who do (or might). As generous as it may appear, the offering of free college courses (on the college's terms), still serves primarily the interests of the college. The reward for the older student does not outweigh the disadvantages. The time commitment required of semester- or quarter-long classes, parking problems, the physical demands of sprawling campuses (possibly over hilly terrain or up numerous flights of stairs), students and professors whose interest in subjects may be more practical than experiential, the lack of social involvement (especially with peers)---these are a few of the deterrents for older learners. Even well-meaning administrators may not be aware of or take into account some of these problems.

Learning Our Lessons

When institutions and older adults collaborate, however, the outcome is very different. In 1974, Marty Knowlton struck up a deal with a New England college to make use of empty dorms and offer short-term educational experiences for older adults. That summer Elderhostel was born. Annually now, over 165,000 people participate in the rapidly-growing program which is sponsored by some 1500 educational institutions in the U.S. and by at least 38 other countries as well. Both parties benefit with this program. The participants are academically challenged, and the intensive week of classes, activities, and shared meals fosters many friendships. The institution generates income from otherwise vacant facilities, showcases talented faculty and even affords them opportunities to teach subjects outside the traditional range of course offerings (the history of the automobile, taught by a physics professor and the origin of printing taught by a librarian, have been popular at my university). Perhaps most important, though, is the goodwill and publicity produced by the alliance. An army of public relations managers could not accomplish what a handful of happy Elderhostelers have been able to do for some institutions.

Elderhostel is a prime example of this trend toward programming at the grassroots level. Kannel observes that with dwindling federal funds, communities are being forced to unite and solve their own problems in their own ways, whether that involves recycling resources or housing the homeless. In order to be successful, these solutions must be created by the community rather than imposed upon it. I am reminded here of an incident that occurred in my own community regarding school district rezoning. Some years ago when this was necessary, the plan was drawn up by experts and administrators and announced to the public only after completion. They were promptly greeted with an auditorium full of irate families. The most recent rezoning was widely publicized in advance and suggestions and opinions were solicited. So far I have seen no letters to the editor protesting the latest plan. "The people of the community, the people at the heart of any program," states Kannel, "are the true experts. Educators will need to be skilled in processes, not only in management or models.[2]

Part of what makes Elderhostel so astonishingly successful is that the organization is responsive to the needs of its participants. Attending Elderhostel generally requires travel. It also routinely begins on Sunday and ends on Saturday. When discount airfares began requiring a

Saturday night stayover, Elderhostel responded to the need expressed by their participants by encouraging institutions to offer stayover privileges for one night before or one night offer programs. This may seem rather trivial, but to older adults on a budget it might influence which programs they were able to attend. They point is that Elderhostel listened and responded.

Elderhostel also encourages diversity and experimentation within its basic format. Institutions can make use of their strengths and amenities their communities have to offer, whether that is cross-country skiing or marine biology. Elderhostel never presumes to tell its participants what's good for them, nor does it accept stereotypes of the elderly. Therefore, it is not unusual to find in their catalogue such diverse offerings as courses on human sexuality, computers, and white-water rafting---topics unlikely to have been originated through traditional educational programming channels.

Facilitating and Trusting

Even more typical of the grassroots approach to generating programs for older adults are the learning-in-retirement institutes. In some respects these organizations defy definition. They share a certain number of characteristics: they include retirement-age people, they are affiliated with an educational institution, they are membership organizations, they offer both academic experiences and social interaction, they attempt to operate at minimal cost to members, and they are self-governing. Yet, even these basic characteristics have been shaped to fit the needs and desires of particular groups. The fact that each organization is unique and reflects the philosophy, concerns, and character of its community can be seen in the variety of the names adopted by each, whether it is the PLATO Society of UCLA, the Institute for Retired Professionals in New York, or New Horizons of Birmingham, Alabama.

These organizations would be nearly impossible to develop through traditional hierarchical program development methods. As our population ages, the needs of our communities change, and so must the ways in which continuing and alternative education meet these needs. Programs will increasingly need facilitators rather than administrators---people who know their community and who will listen and respond rather than dictate and impose. In the short-term these methods may seem inefficient, but without them there will be no long-term.

Older adults may have special requirements, and for the most part sensitive staff and educators can anticipate these needs when working to develop programs with older learners. Physical limitations vary greatly (as the Elderhostel experience illustrates)---some participants may not drive or have difficulty walking from outlying parking areas or climbing stairs. The facilitator may need to arrange for parking or shuttle service, or ground floor rooms. Schedules of participants may also vary---some may still be employed full or part-time, or may have to commute to the institution, or have limited time due to travel. Surveys assessing most convenient times, days, and duration of classes and activities may need to be developed. Facilitators may need to assess this. Still, no matter how sensitive or compassionate the facilitator, it would be impossible to anticipate all of the group and individual needs. This is where the traditional authoritarian, paternalistic methods fail us. Not only must we actively seek out the problems, but we must also ask for advice and encourage participation in solving them. And perhaps most difficult of all, we must trust the participants enough to relinquish control over critical aspects of the program. They are the ultimate beneficiaries and must have the final responsibility for making decisions.

Hard Questions and New Beginnings

It is no longer a question of whether we should accommodate this segment of society. Statistics, economics, common sense, and compassion demand it. Not to mention self-interest. We would do well to keep in mind Pogo's maxim. We are not only planning for "them," we are planning for us---all of us. The question now is simply how we will provide what is demanded of us. By all means, we must prepare ourselves for change. But now by reading psychology textbooks on the stages of aging. We must start by reevaluating the purpose of our institutions. To whom are we responsible? And through what means can we best fulfill this obligation? Exchanging models and plans and strategies is useful, but without first confronting these initial questions, all of our efforts are doomed to meet with failure. Together with the older learner we might just lead the way in a real revolution in education---one that finally gives power to the literal meaning of the phrase "continuing education." Now wouldn't that give us all something to look forward to in retirement?

Endnotes

1. Susan J. Kannel. "Program Planning for the Future." Adult Learning (Sept 1989): 23-25+

2. Ibid.

EDUCATION: THE LAST FRONTIER
PROFILES OF NON-TRADITIONAL ADULT LEARNERS

Martha C. Yopp

Introduction

During fall semester, 1990, I taught two sections of AdEd 574, Psychology of the Adult Learner. The majority of the students in this graduate class were currently teaching, tutoring, or evaluating non-traditional adult learners entering or progressing through their institutions. To better relate the curriculum to the adult learners they serve, class members were asked to interview and profile two non-traditional students who were currently enrolled at North Idaho College, a community college in Coeur d'Alene, Idaho, or Lewis Clark State College, a four-year college with a vocational-technical center in Lewiston, Idaho. The full-time University of Idaho students in the class profiled non-traditional students attending the University of Idaho or Washington State University.

The profiles were fascinating. They were all unique but several similar stories unfolded. Probably the most important variable in their success with education this time was based on their acceptance of self, their self-confidence, and their self-esteem. Non-traditional programs must help returning students feel positive about themselves if they are going to feel good about the program. The role of the adult educator in directing, advising, counseling, and nurturing these students cannot be over emphasized. The power and influence of kind and caring instructors frequently makes the real difference in whether these people succeed despite great obstacles. This paper provides poignant feedback from these students and valuable insight about how they feel about themselves, their past, and their future.

Non-traditional Adult Learners

N = 44

Suzanne

Suzanne, 28, dropped out of high school when she was a sophomore and got married. She gave birth to a daughter when she was 17. Her husband was abusive, she divorced, moved back in with her parents and completed

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her GED. She worked at a convenience store until she decided she needed to do something to provide a better living for herself and her daughter. She applied for and received welfare, foodstamps, subsidized housing, financial aid, and work study to attend Washington State University.

Her first semester was terrible. She did miserably in every class. She was depressed, lonely, and isolated. She didn't fit into any student group. According to Suzanne her biggest problem was that she had not dealt with her past before starting back to school. Second semester she did better in school but dropped out after her second year for financial reasons. She decided to take a year off and work but ended up job-hopping until she met her present husband. Suzanne has returned to school part-time taking business and computer classes she feels will help her get a "really good job."

Suzanne is a striking girl with long red hair and flashing brown eyes. She is described as a woman who would look comfortable "dancing around a gypsy campfire, hair tossing, skirts swirling, and jewelry tinkling. Will she every attain her goal of an education and that "really good job," or will she continue to be the "gypsy girl dancing from thing to thing and place to place. It's too soon to tell!

Male 34% N-15 Female 66% N-29

LeRoy

LeRoy, 37, dropped out of high school and enlisted in the Marine Corps. During the 10 years he was in the service he learned how to be an automobile mechanic, married his high school sweetheart, and had four children. After leaving the service he became employed as an automobile mechanic, had four more children, and was doing fairly well until he injured his back and his world fell apart.

LeRoy is currently on state welfare while participating in a vocational rehabilitation program in drafting. His chances for employment as a draftsman for the Idaho Department of Transportation are good unless his back gives him more problems. He is largely optimistic and upbeat. He says, "This is my last chance to become employable and get back to work." He wonders if his instructors realize what a huge responsibility they have assumed in providing an education to him and others like him. He knows his entire future depends upon his education!

Average Age Male & Female - 35
Range: 18 to 62 Years of Age

Betty

Betty, 43, has returned to school to obtain skills that will enable her to get a job to support herself and two children. She quit school after the ninth grade and married when she was 15. She obtained her GED, attended business classes for a short time, and stayed home with her children for a number of years. She worked as a clerk typist from 1979-83 in a district attorney's office in Alaska but resigned toward the end of her fourth pregnancy. She didn't attempt to return to work until 1988. At that time she discovered she did not have the computer skills necessary to re-enter the office environment. She became a school bus driver instead.

Her husband developed a serious drinking problem and after several years of worsening family conditions she left him last summer, 1990, with her two youngest children. She ended up in northern Idaho and enrolled in word processing at North Idaho College. She wanted to take more classes but when school started in the fall she did not have a home and she and her children lived in their van. She was unable to receive food stamps or unemployment insurance because of her change in residency. Before the weather turned cold she found a place to live, began receiving unemployment insurance, and was approved for financial aid. She enjoys school and is motivated to continue her education and enter the work force as quickly as possible in order to support herself and her children.

45% Employed Full or Part-Time, 55% Unemployed

Elizabeth

Elizabeth, 31, is a single parent with two children. Her parents were divorced when she was four and her father accepted no further responsibility for his four children emotionally, physically, or financially. The family was poor and she never felt like she fit in at school. She began smoking pot and taking drugs in the seventh grade. Somehow she made it through the eighth and ninth grades but dropped out in tenth grade. She left town with an older brother and tried to learn the ways of the world on the road. The brother abandoned her when she was 15. She met some Buddhists, worked in a deli, "chanted," and quit taking drugs. She met a man she lived with for three years while she worked as a waitress. She left him and moved to live with a sister.

Two years later she began living with another man and got a job in a plant nursery. They had a daughter and later married. She had another child at age 23. She started working in restaurants and "met lots of men who were artistic." The couple divorced. Elizabeth began working for two artists who design clothes. She took a class in fashion merchandising--her first class since dropping out of high school 10 years earlier. She decided she wanted to work toward a career and that required schooling.

Idaho Housing helped Elizabeth find a house and Job Service sent her to a five week secretarial course. She completed the course, took her GED and enrolled at North Idaho College in a two-year associate of arts degree in liberal arts. She graduated three years later and is currently attending Eastern Washington University majoring in graphic arts and communications. Elizabeth is excited about all the doors that have been opened to her now and feels it is hideous to think about how ignorant she once was. Elizabeth truly believes what most educators never tire of hearing. "Having the opportunity to go back to school as an adult has truly changed my life, and provided me with endless possibilities for success."

High School Diploma 68%,
GED 11%,
High School Dropout 20%

Bill

Bill, 40, is a sophomore at North Idaho College. He was born in Minnesota and raised in Phoenix. His parents reside in Coeur d'Alene and he lives with them during the week while attending school. Bill is married with three children. The youngest was eight-months old at the time of the interview and his wife was pregnant. The family lives several hours away from the college so he only sees them on weekends. This is Bill's fourth marriage. His third wife was killed in an automobile accident.

Bill dropped out of high school in the tenth grade. When he was drafted during the Vietnam aggression he enlisted in the Marine Corps. After leaving the service he obtained his GED, and attended a trade school in California. He had a series of jobs as a logger, pin setter, mechanic, and brakeman. Several years ago he received intensive counseling at the Spokane Veterans Hospital for post-traumatic stress disorder connected with his tour in Vietnam. He receives veterans benefits for a 30 percent disability. He is in college because of a strong desire to do something with his life. He believes Vietnam "screwed up his life totally and getting an education is the only way to rectify that."

Bill was recently hired as a peer tutor at NIC. He will help other students with history. He is very excited about the position. Not long ago Bill avoided all contact with other adults. Now, Bill is looking forward to a career in electrical engineering and purchasing a boat he and his family can live on.

Married 45%, Divorced 23%, Single 14%, Widowed 6%

Bonnie

Bonnie, 53, is in her third year at North Idaho College. She has been married for over 30 years to a man with chronic health problems including alcoholism. She was a wife and mother who devoted all her energy into managing this difficult unhappy relationship. There was never enough money and the family survived with help from the state and their church.

At age 50, Bonnie enrolled at the Center for New Directions. She realized that if her husband died she would be completely without income and unable to support herself. Her husband is not supportive of her educational efforts and attempts to use guilt, threats, and ridicule to dissuade her but it has not worked. Bonnie commuted 60 miles each way to class for almost three years but recently moved out of the family home and into an apartment in Coeur d'Alene. This has escalated her husband's stress and she has lost the emotional and financial support from her church.

Bonnie wants to get a college degree in social work. She struggles with her classes and realizes this goal may not be realistic. She has two years of work study experience and has some secretarial skills. She considers getting a secretarial job and continuing her classes part-time. She admits living one day at a time and states that school is the most important thing in her life. Bonnie asks for and receives support and nurturing from her instructors. She has formed no real friendships with fellow students but she does receive support from attending Al-Anon. She feels alternately optimistic and pessimistic about her future depending on what else is happening in her life. She truly has made the decision, at least temporarily, to give her education top priority.

Dependent Children 70%, Childless 14%

Mary

Mary, 54, is a grandmother who recently successfully completed a nine-month office occupations program. In the 1950's she took typing, shorthand, and business math in high school but dropped out and had not been in a classroom since. At age 53 she prepared for and obtained her GED and enrolled in a beginning typing course before entering the office occupations program. Her reason for enrolling was "to obtain an office job in order to help support herself and her husband." He is employed in a low paying job and money is scarce. The couple have eight grown children and have raised a nine-year old grandson since infancy. Last spring a daughter and three children moved back in. This disrupted the household and resulted in Mary not having much time or a place to study. It also increased the financial burden.

Mary did manage to complete the class and should be employable in an office environment. Despite hardships she did very well. Unlike Elizabeth, Mary did have her husband's complete support. She also had the support of her classmates and her instructor and received lots of peer tutoring. She might not have been as successful in a more traditional learning environment.

Receiving Financial Assistance 50%

Ray

Ray, 46, dropped out of school in the 8th grade. He was 15. Ray married when he was 17 and has seven children. For the past 30 years he has worked as a carpenter and truck driver. Two years ago he was injured while working in Nevada and is no longer able to do construction work. The stress associated with the injury and unemployment resulted in the end of his 27 year marriage. Ray was despondent and began drinking and gambling. He lost everything.

For the past year Ray has tried to turn his life around. He receives workman's compensation insurance and is attending school through vocational rehabilitation. He is studying to get his GED before entering a business management program. He is currently very realistic about his goals and capabilities. He needs instruction in basic skills and is finding it a challenge to "do mental work" after 30 years out of school. After completing his training Ray plans to move back to Nevada and find employment. He is not sure how he will fit into the business world. He feels both a sense of fear and excitement but he is very willing to try.

No Financial Support 34%

Anne

Anne, 29, is divorced but does not have custody of her two children. The children are living in Oregon with their father because of a clause in the custody agreement which stated that she would relinquish custody if she left the state. After her divorce Anne began to go on eating and spending binges. She gained over 30 pounds and became over $10,000 in debt. As her weight ballooned her already low self-esteem descended. Finding herself out of control she moved to Coeur d'Alene where she had supportive relatives. She is working part-time, attending college, and has lost 30 pounds.

Anne is majoring in journalism, a career she aspired to when she was editor of her high school paper. "I feel I am, for the first time, choosing what I love to do. I've loved writing since I was a kid. For me to get a job in journalism is like a kid in a candy store. I have confidence now, I'm not afraid. School gives you information about your world. This is something people who don't go to school never get."

Anne is slowly working her way out of debt and states, "After I get my debts paid, money will never motivate me again. I'll be working and going to school all my life."

Goal: Prepare for a Good Job or Career 95%

Kathy

Kathy, 42 is divorced and is partially disabled with a back injury. She enrolled in a business and office program at Lewis Clark State College to attain the skills necessary for employment as a secretary in a school system. She was married for six years but for the most part has raised her two children by herself. She has not re-married and responded, "Men, who needs them!"

Kathy has worked as a beautician, janitor, and at other odd jobs. She did receive child support from her ex-husband. Currently she simply wants to be a secretary in a school. She enjoys her classes and has an excellent attitude. She is relaxed, flexible and good natured. She always has a smile on her face and a cheery word for everyone. She should be a successful school secretary.

Obstacles: Balancing School, Family, & Work

Diane

Diane, 22, was raised in Wyoming where she graduated from high school. She became pregnant, married, and moved to Arizona. In Arizona she worked as a hostess in a restaurant. The marriage did not work out and she left her husband to move to Lewiston where her father lived. Her reason to attend college was to learn enough to get a good job. Her first contact was the Center for New Directions where she was qualified to receive JTPA funds to complete the medical secretary program at LCSC.

Diane is enjoying the program and is doing quite well. She is anxious to finish and be able to get a job. She also admitted being lonely. She had never lived alone and is finding it difficult to live without another adult in the home. Her father is not providing much, if any, financial or emotional support. Most of Diane's financial problems were resolved by JTPA, but it is evidenc she is encountering problems with loneliness and anxiety associated with her divorce.

Obstacles: Financial Hardship and Exhaustion

Rosanna

Rosanna, 28, was raised in a military family which moved frequently but she and her two sisters and a brother spent most summers in Idaho with their grandparents. Rosanna dropped out of school in the ninth grade. She became pregnant at 15 and was forced into the labor market. She worked at a fish hatchery in the daytime and as a waitress at night to earn enough money to pre-pay her doctor and hospital bills before giving birth.

Rosanna married at age 20 and later gave birth to a second daughter. The daughters are now ages 4 and 13. Unlike many of the other non-traditional students, Rosanna is determined to stay off welfare. She has managed to do this by working very hard. She works as a nurses aide at the Idaho State Hospital for the mentally ill. She returned to the classroom three years ago, completed her GED, enrolled at LCSC, and continued working full-time at the hospital. She is a junior majoring in general studies with an emphasis in psychology. She plans to complete her degree and then enroll in a two-year Masters Program in psychology at the University of Idaho. She would like to become a clinical psychologist, own a small horse ranch, and have a place her kids can always call home.

Rosanna is truly amazing in her scheduling and time management. From Wednesday morning until Friday evening Rosanna gets no sleep. She commutes 40 miles each way each day and attends classes. At night she works at the hospital. She has learned to do two things at once. She cooks breakfast and dinner at the same time. At times she feels overwhelmed but she is determined to reach her goals. She also smiles broadly when talking about how her situation has influenced her 13 year old daughter to do well in school, prepare now to attend college, and to make something of her life the first time around.

Outlook for the Future: Optimistic

Vivian

Vivian, 62, is a widow with one unmarried daughter. She was married for 32 years to a career military man but he died suddenly leaving her with great amounts of debt she knew nothing about. As a result she has insufficient funds to meet her needs. Currently she commutes over an hour per day each way in her 1974 car to attend an office practice class and work four hours per day at minimum wage for the Council on Aging. It's not much but, as Vivian says, "it is a start."

Although she is 62, Vivian needs a job to supplement her income. She believes that with some financial assistance she can succeed. "I am very teachable and trainable," she says. To attend classes and work 20 hours per week she gets up at 5:00 a.m. and goes to bed at 8:30 p.m. She enjoys crocheting and knitting and working in her flower garden. She also says she enjoys getting up early to study.

Epilogue

Time and space only permit me to share 13 individual profiles. There were 31 additional stories which have been shared only in terms of statistical data. The thousands, possibly millions, of adult learners returning to classrooms around the nation are very serious about their education. They are motivated to put their lives and families on hold and to try to balance school, jobs, families, and homework to obtain an education and salable skills. Throughout these profiles there was a common message. They view education as their only option available to obtain a better quality of life and they are willing to endure hardships and make great sacrifices to prepare themselves for a "good job or career."

The high school diploma or GED, which 79 percent of the people profiled do possess, is no longer a ticket into the middle-class. People cannot support themselves and their families earning minimum wage at part-time or dead end jobs. Education is viewed, over and over again, as their only chance for success and self-respect. Forty-two of the forty-four adult learners profiled cited a better job or better pay and security as their ultimate goal and they are committed to endure hardships and uncertainty in their quest for a better life. Education: the Last Frontier.

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